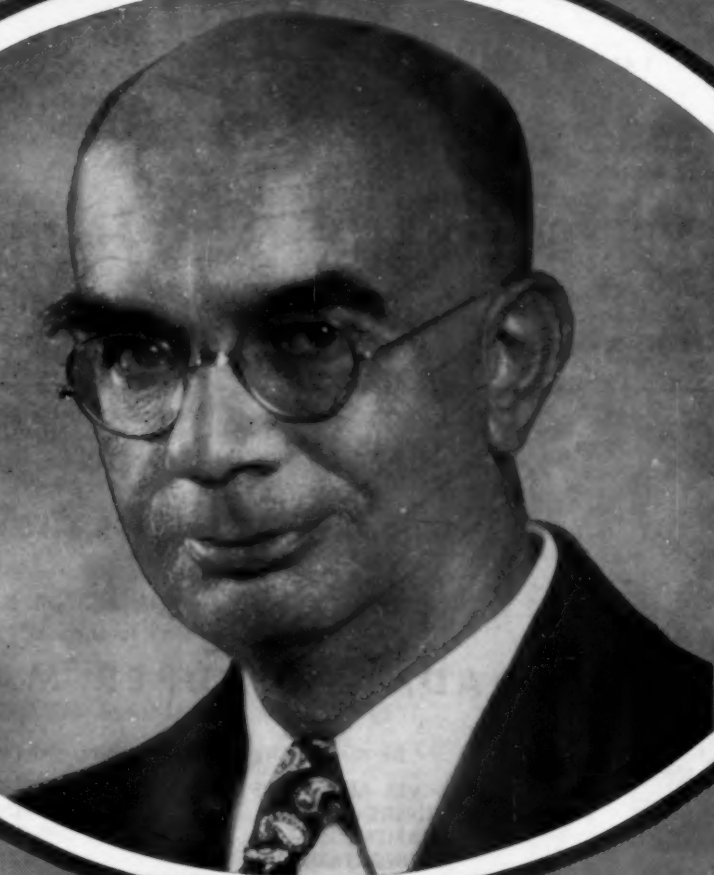


**AMERICAN BEE JOURNAL**



Volume 98

**1958**

Number 5

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# - Our Cover Picture -

## WHO IS IT? — A Contest

Editor, Pat Diehnelt



Edwin J. Anderson

### The April Mystery Guest

Professor Anderson is in charge of apiculture in the Department of Zoology and Entomology at Pennsylvania State University. W. W. Clarke, Jr., Editor of the Beginner Department of the Journal, is also in apicultural extension work in that department.

Professor Anderson started keeping bees with a colony taken from a bee tree in 1914. He entered Penn State as a student in 1920 and began teaching beekeeping as a student assistant in 1921. From 1922 to 1924 he was a deputy inspector. B.S. at Penn State, 1924; M.S. from Cornell, 1925. Taught beekeeping and entomology at Clemson College, S.C. part of 1925 and 1926. Extension Specialist at Penn State 1926 to 1942. Assistant Professor of Apiculture, 1942; full Professor, 1950. Editor of The Pennsylvania Beekeeper. He has developed one of the country's outstanding beekeeping schools held every year at the University.

Editor of the "Bee World" and head of the Bee Research Association. You secure literature from all over the world and make it available to everyone. You have a genuine interest in everything and everybody so you make friends wherever you go. Your winning smile is seen at all the International Congresses. You have little interest in space rockets to realms where there are no blossoms, no bees and no honey. Honey in the morning, honey in the evening and honey at supper time. Dr. Eva Crane, you're a honey all the time. No. 3—Margaret Endsley, Alton, Kansas

Among the prominent people in foreign lands who are doing so much to promote bee research, Dr. Eva Crane is most outstanding. As Editor of "Bee World" she has endeared herself to all who read the magazine. She is competent in any subject relating to bees and she is willing to give of her time and talent to tell about this industry in which she is finding her life's work. Modern beekeeping is much the same the world over so her reports on beekeeping and research are just as applicable to America as England. Her gracious manner and her pleasing personality add much to any meeting in which she is a part.

Congratulations also to No. 4, C. F. Duart, Pierce City, Missouri; No. 5, Eva Smalley, Beaver, Iowa; No. 6, Walter Wilson, City View, Ontario; and to No. 7, P. S. Snow, Wichita, Kansas.

### The Mystery Guest For May

Maybe this is of small importance in determining who our Guest is, but your Journal Editor graduated with him from the same University. Perhaps no other individual has done more for this industry than—Whups! Sorry. You do the guessing. Send your answers to Cover Contest, American Bee Journal, Hamilton, Ill., anytime during May. Make your answer short please. —Now, here is a change. Because of the constant repeats among contestants I have decided to ask winners to retire so more can take part. Also, note the change in awards. Those being offered books just do not choose one. Subscription is an immediately better deal. So, here we go—For the best answer, \$5.00 and a three year subscription; second, two years of ABJ; third, one year. Next four, six months. Answers will be published in July as far as room allows.

### WINNERS FOR THE MARCH COVER CONTEST

No. 1—Giulia Purchase, Wapato, Washington

The grand lady pictured as the Mystery Guest for March is Dr. Eva Crane of England. She received her Ph.D. in nuclear physics from the University of London and she has done research in biological physics. She is the Director of "The Bee World." She made her first trip here in 1953 to study beekeeping and planned then for her second trip in 1957 when she visited sixteen states not visited on her first trip. She also visited Canada, Cuba, and Mexico. Her interest in beekeeping stemmed from the sugar shortage in World War II and she began keeping bees for honey at that time. She

became so interested that she decided to turn her training to the vast field of research open in this new and intriguing venture.

No. 2—Leo Baumeister, Kellogg, Idaho

Glad you did not butcher up this good looking lady as you did with Eckert and Holzberlein in the "Scramble." Ladies to the front; men and donkies to the rear. So, dear Queen Bee of March, I do not know whether you know all about birds, but I do know you know about bees from A to Z. You wrote the booklet explaining the terms used by beekeepers in English, French, German and Dutch. You hold academic degrees galore; B.Sc., M.Sc., Ph.D., in mathematics and physics. You are

### NEW HONEY LEGISLATION INTRODUCED

With the cooperation of the National Conference of Farm Commodity Groups identical bills have been introduced in the Senate and House of Representatives by Senators Edward J. Thye of Minnesota, James O. Eastland of Mississippi and Representative Colmer of Mississippi (at least one other Representative has agreed to introduce a similar bill in the House). These bills have been designated as S. 3382 in the Senate and H. R. 11215 in the House and have been referred to the respective Agriculture Committees of both Houses.

We urge all beekeepers to write their respective Senators and Congressmen requesting them to support this amendment when it is considered. The amendment would raise the minimum support level for tung nuts and honey to 75% of parity instead of the present minimum of 60%. (from March-April Federation News Letter)

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## The American Bee Journal — Hamilton, Illinois

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Associate Editors—M. G. Dadant,  
Roy A. Grout

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# The Commercial Beekeeper

This is a part of an 85 colony yard in old style Dadant hives along the bluffs of the Mississippi near Hamilton. Some of our bee men still use this big hive. Now we like small yards with 20 to 40 colonies. As honey sources change the big yards do not work out satisfactorily. Even small yards a half mile apart gather more honey than one big one.

## What Makes A Good Bee Truck?

by John W. Holzberlein

A beekeeper's truck usually lasts for several years. Partly because we do not use them much in the off season, and partly because even when we use them every day the work is not hard on them and they are still in mechanically good condition after the average truck has been worn out and traded off for a new one. For this reason it is important that when we buy one we carefully select the truck best fitted to our business.

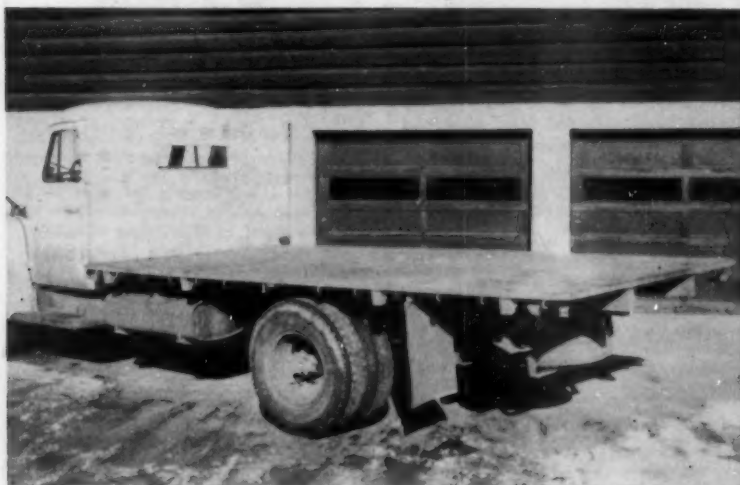
What is the best truck? That, of course, largely depends on just what we want to do with it. If one is a part-time producer, with only one or two outyards, a pickup will



no doubt be the answer. But if one is a commercial producer, one whose living depends on his bees, then his truck is one of his most

*(Just turn the page, please)*

At left, side of bee truck showing location of stringers. Floor is bolted to angle irons which are first bolted to the outside of the stringers. Bed is fastened to the frame of the truck with clamps made of 1/2 inch rods. At right, the top of bed showing location of wheel plates. Floor is made of dressed v.g. fir, 2 x 6's with edges grooved and splined. Bed is bound all around with 1 1/2 by 1 1/2 angle iron.



important pieces of equipment. If he is a large enough operator he will have truck equipment of several types, pickups for light, fast trips, and large trucks for long, over-the-road trips; perhaps even a semi or two. For these top-sized outfits not much need be said, for the men who operate them have come up through years of experience and know what they want and need. But there are hundreds of medium sized, one-or two-man bee outfits, that operate with one truck mostly or one truck and a pickup, that might increase the efficiency of operation by the use of a truck more fitted to the business of keeping bees than anything that can be bought on the dealers' floor.

For the chassis itself, we are pretty much dependent on what the dealer has to offer. The choice in these is becoming wider each year as to carrying capacity, motor size, wheel base, and rear end ratio. Since most of what we haul is bulky rather than excessively heavy a truck is needed with comparatively long wheel base so that large loads of bee colonies, empty supers and other equipment may be hauled without getting the load too high. When the heavy stuff comes up for hauling, namely honey, we just do not fill the bed. A beekeeper will make 25-50 trips on other business for every load of honey that he hauls anyhow. After one has made his choice of the features he wants in a truck as to speed, carrying capacity, style, etc. there is still the matter of wheel size. The size of the truck's wheels pretty much governs the height of the bed from the ground and since most of us work directly off of our trucks in the bee yard it will save a lot of effort to have them as low as practical. The larger the wheel size the easier the truck will roll. But that is about the only advantage of the large wheel, and if we are going to work off of the truck like most beekeepers do it will be far more important to have a wheel size that will permit us to do it as easily as possible. For this the 16 inch or 17 inch wheel size is about right. There are several makes of trucks that offer these small wheel sizes in the ¾ or 1 ton models, and at least one manufacturer, International, offers the 1½ ton model with 17 inch wheels. The wheels take either the 7:50 or 8:25 tires. The 7:50 size is standard on this model and will handle 5 tons nicely. The larger sized tires will carry about one ton more.

By studying the specifications of all the makes available, one can find just about the ideal chassis for the job. It is in body selection where there is little choice, and nothing is offered ready-made that is really suited for bee work. But most beekeepers are mechanically accomplished enough to build their own truck beds and many of them do. A well-built truck bed will outlast a couple of trucks, and for this reason it pays to study the needs carefully and build the best bed possible to fit them. Smoothness, sturdiness, and neatness of appearance are all important. But nearness to the ground should be the first consideration. The factory-made truck beds all have more wheel clearance than necessary. By cutting the clearance to the minimum and building the bed to take up the least possible space, the distance from the bed to the ground may be lowered as much as 10 inches below what the height of the factory-built bed would be. Think what a difference that would make in loading supers of honey or hives of bees. Our 1½ ton truck has a bed height of 38 inches from the ground, and yet it will handle 5 tons without the tires being rubbed. If one has to use chains often a little more clearance might be advisable. Ours has 4½ inch clearance.

By observing all the beekeeper-built truck beds we could, it seemed that the lowest ones and the simplest ones were built with the floor material running crosswise of the sills. Since in this method only two supports carry the full width of the truck, good material should be chosen. Vertical grain, clear, 2 inch Oregon fir is satisfactory. But 2 inch apitong, a type of mahogany, is better, though it is not always available and rather costly. It is quite strong, is not inclined to splinter as fir sometimes does, and does not have the tendency to warp that oak does.

The planks should be thoroughly dry and carefully fitted. They should be either tongue and grooved, or grooved on each edge and then splined. When the bed is finished it should be absolutely smooth. This can be best accomplished by countersinking all bolt heads and the angle iron that binds the edge. When the job is done it should be sanded with a power sander. This will remove all unevenness caused by a difference in the thickness of the material. One can best just drive his truck to the local lumber yard and hire this done for a few dollars. The finished bed should then be given a couple of

coats of good deck paint or thoroughly soaked with hot linseed oil. The linseed oil treatment is really the best, I believe, for it can be repeated each year without removing all of the beeswax that is sure to be present.

When building the bed, about 1½ inches can be taken off the height by leaving out the wood floor and putting wheel plates of ½ inch steel deck plate over the wheels.

The front end of the bed should be securely fastened to the head-board. This braces it. In the center and at the rear end there should be channel iron braces run from the edge of the bed to the frame on each side.

Since we load and unload mostly from the side while in the bee yard we rarely use side boards, but do have stake pockets so that sides can be used when necessary. It would be hard to put too many rope hooks on a bee truck, don't spare them.

We make our truck beds 88 inches wide and about 13 ft. long. This width is wide enough to fit most equipment with no unnecessary space left over. Five 10 frame hives may be loaded across the width and seven long, making 35 10-frame colonies to a tier. If we moved many bees a longer wheel base would be better, permitting the use of a 16 ft. bed and a boom-type loader. The boom loader is just about a "must" on a modern bee truck. They will not only load colonies but can be adapted for loading supers of honey and other things as well. It is my conclusion that we pay for a loader in some way whether we enjoy the use of one or not. They will come the closest to paying for themselves of any piece of equipment we use that we do not absolutely have to have. Bad backs are practically an occupational disease among beekeepers. The general use of the boom-type loader may result in a generation of beekeepers with less back trouble.

Where one does most of his own work, and has such power tools as an electric drill and bench saw the cash outlay for the truck bed described need not be much over one-half of the cost of a factory-built bed. However the first consideration should not be cost, but rather the adaptability to the job and the labor-saving features that can be incorporated in this adaptability.

Colorado





Secondary area overlooking the Mississippi bottom lands. Once it was a yearly source of honey from heartsease and Spanish needle. Now it has little commercial value.

## Keeping Bees In Secondary and Marginal Areas

by Robert M. Mead

Even in the best honey producing states the top beekeeping areas are often limited to rather restricted districts. In Vermont the prime area is a narrow strip running along the shores of Lake Champlain. In California the honey crop districts closely follow other special crop districts. In almost every state in the country the same condition can be demonstrated. We are a honey producing country, yet most of our bees and 95% of our commercial beekeepers are located on probably not over a tenth of our total area. The rest of the country, as far as beekeeping goes, rates from possible to entirely impossible.

The impossible is easy to dispose of. It consists of barren desert areas, of plains areas largely in grass, of dense and remote forest areas without honey yielding trees. Yet nature is of such character that the worst is nearly as scarce as the best. What we do have in the greatest measure is territory in which bees can live, in which they can live and make some surplus even, and yet which is not quite good enough for the average commercial venture.

These vast areas of marginal honey producing country have some interesting variations. In some the only crop worth mentioning may come from fall flowers and bees are kept the whole season to produce, on the

average, one shallow super of dark honey. Or the season's crop may come in ten days from basswood as happens near one eastern city.

The question is, does it pay to keep bees in these areas where the crop can be depended on to run under fifty pounds? The answer depends somewhat on one's interpretation of the word pay. Most such areas do not lend themselves readily to making a living from bees, if by a living we mean having an income large enough to support trucks, hired help and all the other blessings and curses of a going business. On the other hand beekeeping in such areas can certainly be made to pay the hobbist and the sideline, who dabbles in a little bit of everything.

It has always seemed to me that making bees pay in a marginal area depended a good deal on working out a sensible program of beekeeping especially tailored to that location and its crop peculiarities. Above all if the crop is to be small and any possible profits limited then beekeeping should be simplified just as far as possible because any elaborate method will use too much time and labor.

The basic method, especially adapted to such localities, which I have taught, preached and advocated is, first of all, to make the bees just as self-sustaining as possible. A ten

frame hive is not quite big enough for this purpose so the minimum unit to be considered useful is the standard hive plus a shallow super as food chamber. And because this unit is often not quite large enough, a standard and two shallows are better or one can use two full depth bodies. With a basic hive of this size there is a strong tendency to have good sized clusters the year around and if any honey is available at all the bees will store enough in a hive of this dimension so that they do not need constant feeding, or constant checking to see if they need feed. This idea of course has nothing new about it; it is in constant use by professionals in good bee territory but the more marginal the region the more important the large self-sustaining hive becomes.

Seasonal management is kept at a minimum. Bees should be checked carefully every spring to see that they have a reserve of feed, a good laying queen and that they are free from disease. As the swarm builds up in size, additional room, preferably in the shape of empty combs, should be given, and at the time of whatever honeyflow the locality affords they should be checked again to see that they have storage room.

The man who keeps bees for the fun of it can of course fool around with them all he wants and use whatever complicated management meth-



ods he finds interesting. I have been advocating the most simple method possible for marginal areas because I think it works best, gives the best returns for the effort involved, and I believe if it is correctly adapted to some marginal areas, they would become suitable for commercial operations.

The most often asked question is "How many swarms can be kept in an apiary?" If the potential of the area is unknown or thought to be low I would start with two swarms. Two hives should give some honey for home use if the area is such that they can do anything at all and depending on how these two do, the number can be increased later on. Four swarms should furnish honey for a large family in any area where bees can be kept at all and a dozen should yield some honey to sell to neighbors as well. Incidentally a dozen swarms in a location seems to be just about the right amount in

the areas that I have seen that run close to marginal in character.

To those that are interested in beekeeping but that live in areas having only small honeyflows, some hopes of improvement are always possible. Areas do change for the better (and I regret to add, also for the worse). Probably changes in farm practice offer the greatest hope in most instances. Increased use of crimson clover has helped many locations in the South. Trefoil growing is changing the honey picture here in Vermont. In all forest areas there is a chance of honey plants coming in in appreciable quantities following extensive harvesting of lumber and pulp.

It is worth mentioning that in some localities that wild bees, adapted by nature to the hardship of the area, are more suitable for that particular location than most commercial strains. A start can be made with these by taking up wild swarms and

that in itself is a worth-while beekeeping experience.

In any case the marginal areas should not be ignored by the industry. It is the natural area for the hobbyist and with the correct methods, may even have some value for the semi-commercial operator.

#### **This "Red Face" Business Gets Worse**

In his short article "Pollen for Rapid Package Build-Up" in March, Myron Frisque is really put on a spot in the paragraph beginning "Beekeepers in this area—"it reads further (in the same paragraph) "I have found wintering in this area profitable—" It should be "I have *never* found wintering in this area profitable—" Now how can a little old editor make a worse mistake? Just one small word "never." Well read it again and add "never" and then it is understandable and correct. Sorry, Mike.



## **Pre-Flow Management for Comb Honey**

**by Carl E. and  
Eugene Killion**



Those who expect to produce comb honey exclusively must make every effort to have all colonies in the very best condition. Whether producing comb honey or extracted honey, the beekeeper should remember that his colonies should be strongest in field bees at the start of the expected honeyflow. It is better to have the workers reach their maximum number a few days after the flow is under way than to reach this stage too early, as in the latter case the bees will start loafing.

Our method is to winter all colonies in double brood chambers and for each colony to have a minimum of 70 pounds of honey in the late fall. Any colony containing less than this amount is either given frames of honey or is fed sugar sirup, our preference being frames of honey as most of these will contain some pollen. Our bees do not gather enough pollen in the fall flow for use the following spring, so it is often necessary to feed pollen supplements to many of our colonies

early in the spring.

About one-half of our colonies are packed in light collapsible cases, each holding two colonies. The remaining colonies are arranged in pairs and wrapped with waterproof paper, such as is advertised in the bee magazines. The wrapped colonies do not winter quite as well as those in cases.

The winter wrapping or packing is removed in late March or early

*(Just turn the page)*

April, depending entirely upon weather conditions. As fast as the wrappers are removed, each hive is checked for strength and stores but only those hives which appear light in handling or weak looking at the entrance are opened at this time. Quite often a big, strong colony may not show much activity at the entrance and yet have an excellent cluster. We follow the apiary inspectors' instinct and examine all dead colonies first; the weakest next; and the average looking ones, last. If any frames of honey are found in the dead or weak colonies, they are taken out and given on top of stronger colonies which are in need of food.

In most cases of weak colonies, the bees occupy only one hive body and we have found it to be a good practice to unite some of these, especially if one of the queens is below normal. After uniting, we have two extra hive bodies which we take into the shop, where they are cleaned of burr comb and propolis and imperfect combs replaced with more perfect ones before they are again used in the apiary. The painting of the hive bodies and other necessary repairs can also be done at this time.

After the unpacking, the uniting of weak colonies, and the feeding of light ones is finished, very little apiary work is required until fruit and dandelion blossoms appear. As soon as the latter start blooming we begin the clipping of queens, the date of clipping being recorded in our apiary record book. It would be impossible to run outapiaries for comb honey without clipping the queen's wing. During this clipping period the general condition of each colony is noted and wherever needed additional uniting and feeding is done at this time, as our first round was more of an emergency measure. Weather conditions are rather uncertain at this time of the year and many times our clipping operation is delayed several days before it is completed.

We depend upon the dandelion for nectar, pollen, and the natural build-up period for an adequate force of young worker bees with which to gather the crop. In favorable years some colonies will store a surplus of dandelion honey above their immediate brood-rearing need, but if weather conditions prevent bees from getting a fair amount from dandelion, they must be fed sugar sirup and considerably more pollen supplement. The first and second

week of April will find us starting to feed supplements, but it should be stated that we delay our supplement feeding later than many who feed supplements. If we wished to feed for starting our own packages, it would be done earlier. Occasionally we find a colony which needs pollen earlier than the others and in such cases this individual colony is fed.

If the bees have the opportunity to work the dandelion and fruit blossoms to any extent, we start reversing the position of the two hive bodies on most of the colonies, reversing them as often as is necessary so that the queen may have nearly identical conditions in both bodies. The extra strong colonies may need a third body in which to expand, and there are a few exceptions when four hive bodies are needed.

As this early flow starts to taper off, we are faced with one of our annual problems: How long must we continue to feed and reverse hive bodies before the clover flow starts? Over a 35-year period, the beginning of our flows has varied from May 16 to June 23. These dates are the two extremes, the average being about June 7.

The feeding of both sirup and supplements must continue until the flow gets under way. We, like all beekeepers, have lost a few colonies by starvation, in most cases the flow of nectar being only two or three days away. It is important to watch the stores in each colony right up to the time the flow starts, this being especially true of the extra strong ones.

The two hive bodies are fairly jammed with fresh nectar before we reduce the colony to a single hive body and give it the first comb honey super. Waiting for this abundance of nectar eliminates any feeding of the increase we make with the extra hive body. The frequent reversing of hive bodies previous to the reducing or "cutting down," gives almost the same brood pattern in each body, therefore, either one may be left for the comb producing colony. Most of the bees in the body of combs taken away are shaken in front of the hive body left on the parent stand. The body of brood taken away, which now has only enough bees to care for the brood, may be used to help a weak colony or it may be used to start increase, adding to it until the increase is at least three or four bodies high.

Illinois

## The Great Blizzard of 1958



That's what Garnett Puett, Manager of the Dadant Branch Office at Milledgeville, Georgia, calls this snow way down yonder. He wonders if these hives should have been wrapped. If any were lost it would be from lack of stores. Here in the North we would have at least a shallow super on all such colonies. But likely down there the bees get a supply from the spring blossoms long before we do. So it is just an unusual picture of snow in the South. However, similar conditions through the whole southern area greatly delayed the production of bees and queens.



**SNOW IN THE SOUTH**—A. V. Dowling, Valdosta, Georgia, one morning found this "northern" scene enveloping his apiaries. The picture was taken on February 13th.



**COUNTY EXHIBIT**—Our "Beginner" Editor, Bill Clarke, thought this county exhibit worth scanning by the county associations. A Lancaster County, Pennsylvania, honey exhibit by the Lancaster County Honey Producers. Note the clock: "It's Honey Time Any Time."



**JAMIESON FAMILY**—Dr. C. A. Jamieson, cover Mystery Guest for February, sends this picture of himself and family. Dr. Jamieson, center, and Mrs. Ruth Jamieson. In front, Sandra, now 12; back, left, Valerie, now 14; and baby Katherine, now 7. Nice to meet you folks.



**MAYOR AND BEES**—Dirk Bloemendaal, Holland, Mich., is a fine photographer and sent this picture of his father, Dr. D. C. Bloemendaal, physician and surgeon in Zeeland, Mich., and his sister. Dirk Bloemendaal was elected Mayor of Zeeland (1957). Dirk says his father takes more interest in his bees than in any other thing.



**LIGHTNING**—Carl Kalhoff, Lexington, Mo., here shows what a bolt of lightning can do in a bee yard. Not very nice, is it?



**BEAR BY THE FEET**—Harold Lilley, Lilley Bee Apiaries, Vineland, Ontario, trapped this marauder and hung him, trap and all, on the side of his truck. Bears love honey and a bee yard is an open invitation.

# The Sideline Beekeeper

Ever see an outdoor colony like this? The picture was taken by one of the directors of the Ford Schools at Dearborn, Michigan. We have been supplied with many pictures of outdoor colonies but not one of them could equal this.



## BEES AS AN F.F.A. PROJECT by Harland Wells

Senior at Ripley High School, Vice President of Ripley FFA Chapter, Member of Oklahoma Farmers Union, President of Payne County Junior Farmers Union. Owns 27 colonies of bees.

Bees bored me. From the day when my father first stuck a bee veil on me and let me tag along as he worked hives, until I learned enough to know what was going on—their buzzing didn't make an impression.

But as time went on and a high school freshman discovered that there was more to it than squeezing a smoker and easing a hive tool between supers, he decided bees might be all right. Today that freshman is an ancient senior and the owner of 27 hives.

Harland standing beside his bee yard in the Mehan Valley, near Ripley, Oklahoma.



During the spring of 1954, I figured Harland B. had learned all there was to know in the lessons from my father. So I donned veil and disregarded gloves. Twirling a trusty .44 caliber smoker, I launched the attack.

Well, now I know. You don't attack a beehive. You pet it. That should be lesson number one for any amateur apiarist. My first attack ended up with me sitting out the next week with swollen hands and some mighty tender spots on my hide. Yes, those bees almost bored me to death with their stingers.

After that first disastrous attempt, I stuck to holding the smoker for two

Harland and some of the honey he produced.





more years and *really watched* when my dad took me along. That way I swapped out labor. I would carry the hive tool and smoker and lift the supers on and off the hives. In return, my father, Tony Wells, would give me lessons and work my bees. I got the best of that bargain, even though lugging more than 500 supers runs into a sizable chore.

Before I tried my initial adventure with bees, my dad had urged me to read the American Bee Journal and pick up information. Naturally, I didn't. While my hands were losing their swelling, I suddenly discovered much of interest in the Journal. Since then I've made it a practice to read each edition from cover to cover.

That freshman year, I bought a pair of hives for an F.F.A. project. In January 1957, I went all out and got 25 more hives. The entire apiary contained Italian bees.

As an F.F.A. project, these bees are hard to beat. I've had swine, crops, beef and a major dairy project along with bees. At fairs the bees have been important and win as a rule not as an exception.

A \$15.00 premium for the best honey exhibit in Payne County, Oklahoma, was the first prize the bees picked up. As an exhibit, honey is nearly all profit. There are no entry fees and competition is not nearly as strong as it should be.

Over the years, honey exhibits have netted \$75.00 in winnings in competition in Oklahoma shows for me. If more beekeepers would exhibit, there would be a great deal more netted by the apiarist. The beekeeper has a distinct advantage over other forms of agriculture. He can exhibit his product at fairs in an edible form.

Because we live in north central Oklahoma, 20 miles southeast of Stillwater on the Cimarron River, the nectar supply is uncertain. However, there is plenty to put us in business. My father has 80 hives now at the end of a drought cycle. He plans to expand his apiary to more than 100 hives.

My apiary is located in the upper end of the Mehan Valley, about three miles from the river. The bees forage on fruit bloom, redbud, blackberry, willows, locusts, vetch, persimmon, sweet clover, alfalfa, sumac, buckbrush and heartsease.

The bees yielded about \$65 last year. My goal this year is for a \$20 profit on each hive. The first year was very slow because the hives were deteriorated and down to one

hive body when I bought them. Now they have two hive bodies each and at least three supers per hive. Each hive had about 75 pounds of honey left on it to help the colonies get an early start this year. In addition, some colonies were doubled up last year and all were requeened during the fall.

When I bought the 25 hives last year they were priced at \$10 each. They have built themselves up to a \$30 value now and are ready for an early start this spring.

Bees don't bore me any more. The

experience of working with them and helping them build their colonies has been invaluable. Any F.F.A. member could learn much of the gentle care needed for all living things from bee care.

But maybe one of the real gains came at a show last fall. The judge was examining my exhibit of four two-pound jars of honey and said, "All of this honey looks alike." One member of my chapter was standing nearby. He answered wisely, "It ought to, it came from the same bee." I certainly wish it had.

### Illinois Honey and Pollen Plants

A revised edition of this important bulletin by Dr. V. G. Milum is now available from the Department of Horticulture, University of Illinois, Urbana, thirteen pages and cover. It classifies the honey and pollen plants and gives the chemical composition of Illinois honeys. It also gives the blooming dates and the honey characteristics. A very valuable manual.

### Miracle Food for Hazel Bishop

On Thursday evening, March 20, on the Jane Wyman program, Hazel Bishop lipstick was advertised as containing royal jelly, "miracle food of the queen bee."

### Honey and Royal Jelly Keeps Hildegard Fit

Hildegard, the famous night club entertainer, told how she keeps fit in a nation-wide radio interview recently. She said she eats honey and takes royal jelly. She also eats other healthful foods and exercises regularly.

(from Colorado B-Notes, Feb.)

### Honey and Toast for Ike

Honey and toast are included in the breakfast menu of President Eisenhower, reports Walter Fliegner of Riverton, Wyo. The President's diet has been carefully prescribed by physicians and it once again shows the high regard the medical profession has for honey as a food.

(from Colorado B-Notes, Feb.)

## Royal Jelly Foundation

The formation of an organization of royal jelly producers to attempt research on royal jelly as announced in another page of this magazine is decidedly a wise course. Selection of the proper agencies to make the investigation so that there may be no possibility of collusion is a must.

While the scientific work with royal jelly in this country has been discouraged, we believe, by capitalization on the product by so-called food-faddist organizations, still we do not believe either bureaucratic or other agencies are in a position to offer evidence that the work and the claims from abroad are but thin air. At least proof of such negative tests have never been made public, and the mere statement attributed to one official that one had best spend all his money at a super market for food rather than dabble with royal jelly and that such infinitesimal amounts of the jelly as are being recommended can have no value whatever, seem to us ill-advised.

It is not with such attitudes that the Salk vaccine and other phenomenal advances have been made in the past. Who would think that small amounts of common mold could have a purpose.

We hope that this royal jelly foundation may be the means of settling the actual value of this substance in the diet and its availability perhaps for health purposes.

# A Many Purpose Honey Tank\*\*

by Edwin J. Anderson

\*\* Authorized for publication on February 4, 1958 as paper No. 2224 in the journal series of the Pennsylvania Agricultural Experiment Station.

The honey bottling tank described below was designed for the beekeeper who wishes to supply his local market with a high quality, extracted honey and have on hand a minimum amount of equipment to do the job. Since this tank will hold from 180 to 300 pounds of honey, it is evident that it is designed for the smaller operator. The equipment is designed for electricity as a source of heat.

The tank with accessories will make it possible for the beekeeper to:

1. Liquefy three 60 pound cans of crystallized honey and strain the heated honey in the tank.
2. Liquefy honey that has crystallized in bottles.
3. Preheat extracted honey to kill the yeast before seed honey is added to make creamed honey.
4. Heat honey either before or after it is bottled to prevent crystallization.

The tank with accessories consists of eight parts:

1. A stainless steel tank 36½ inches long, 12 inches wide, and 13 inches deep, made of 20 gauge sheet metal.
2. A stainless steel water jacket, 36½ inches long, 12 inches wide, and 1¾ inches deep made of 20 gauge sheet metal.\*
3. A stainless steel filling and ex-

pansion chamber 8 inches high, 8 inches long, and 2 inches wide.\*

\* The photographs show galvanized iron used to make the water jacket and filling chamber. It was found that this type of sheet metal rusted rather quickly and was not the right material for this purpose.

4. Two flexible immersion heating units to heat the water in the jacket. (Manufactured by the American Instrument Co., Georgia Ave., Silver Springs, Maryland). One unit is rated at 1000 watt capacity and 4 feet long and the other at 500 watts and 3 feet long for operation at 115 volt. When 230 volt lines are available, heating units of greater wattages (1500 and 500 watts, respectively) may be used.
5. A straining basket that fits into one end of the tank.
6. A 90 mesh nylon or bolting-cloth bag made to fit inside the strainer basket.
7. A thermostat of the surface mounted type for domestic electric water heaters may be used to control the temperature of the water in the water jacket. Other types of thermostats made for this purpose may be used.
8. A removable screen for the bottom of the tank.

Taking these eight parts in consecutive order the tank is constructed and assembled according to the following directions.

Part No. 1. The stainless steel tank is made only with a noncorroding type of stainless steel. The top edges of the tank are turned twice to form an inverted U or channel around this edge. The channel strengthens the top and prevents buckling. The outer edge turned down ½ inch wide and the horizontal part is ¾ inch wide. The reinforced edges are not shown in the figures. The corners of the tank are constructed with hobo or lock joints to insure maximum strength. The tank is provided with a 1 inch opening or hole in the middle of one end, this opening is cut level with the bottom of the tank. A plate and a 1¼ inch bottle filler are attached over this opening. A space for the strainer is provided at the other end of the tank by means of 4 pieces of ¾ x ¾ x 1 inch stainless steel angle. Two of the pieces are soldered to each side of the tank at a distance of 4 inches from the end, two are placed 1 inch from the top and the other two are soldered two inches from the bottom of each side of the tank. The strainer when in use, is placed between the pieces of angle and the end of the tank, figure 2.

Parts No. 2 and 4. The top of the water jacket has an edge ½ inch wide turned in and this edge is soldered to the bottom of the tank, figure 1, the jacket is provided with three openings: a. one opening is cut in the side 4 inches from the end and on the top

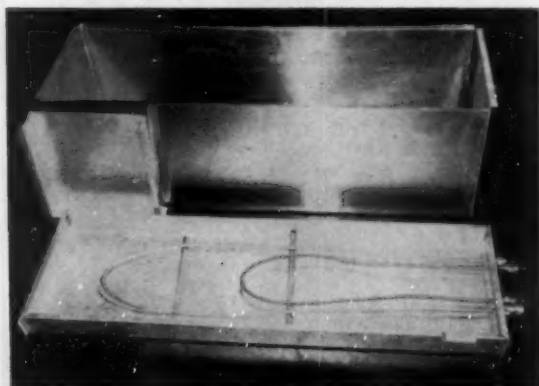


FIGURE 1. The three metal parts of the tank before they are assembled, the stainless steel tank, the stainless steel water jacket, and the stainless steel overflow chamber. This tank lacks the strengthening channel along the top edges. The placement of the electrical heating elements are also shown.

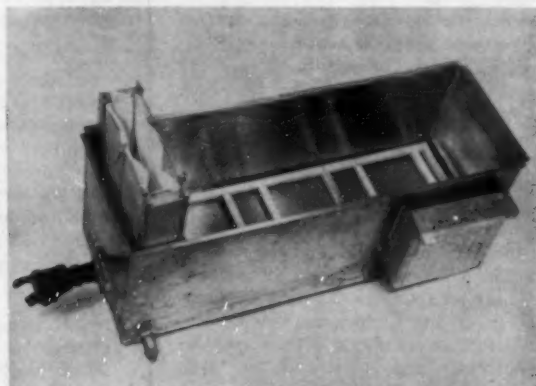


FIGURE 2. The completed tank and accessories.

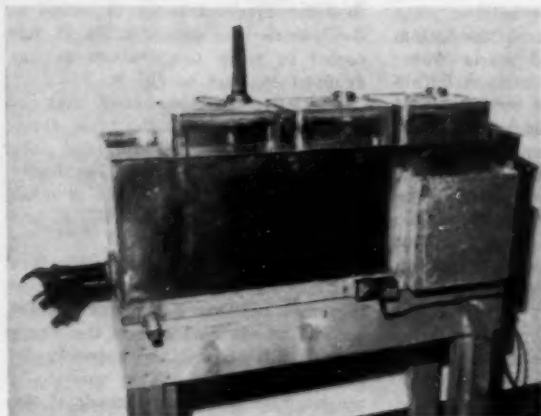


FIGURE 3. The tank with 3-60 pound cans of crystallized honey being liquefied. The thermostat is shown on the left of filling and overflow chamber.

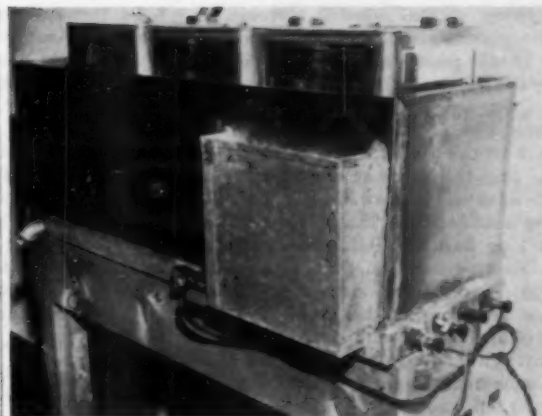


FIGURE 4. End view of tank showing terminals of heating units.

of the jacket, it is made 3 inches long and  $\frac{3}{4}$  inch deep. It serves as an inlet for water when the jacket is being filled. b. A  $\frac{3}{4}$  inch hole is bored in the same side but 3 inches from the opposite end, it is covered with a faucet or plug, figure 2, and is used to drain the water from the jacket when it is not in use. This opening is cut level with the bottom of the jacket. c. A slot  $\frac{3}{8}$  inch wide by  $9\frac{1}{2}$  inches long is cut in the middle of one end of the water jacket. It is cut in the end that will be opposite the bottle filler when the parts are soldered together. The two heating units are attached to a piece of stainless steel  $1\frac{1}{2}$  by  $10\frac{1}{2}$  inches and inserted through the slot. The stainless steel containing the heating units is soldered to the water jacket, after the jacket is attached to the tank. Two pieces of stainless steel angle  $\frac{1}{2} \times \frac{1}{2} \times 10$  inches long, are soldered to the bottom of the jacket. The heating units rest on them and are held  $\frac{1}{2}$  inch off the bottom of the jacket to permit the water to circulate around the units. The jacket is soldered to the tank first, then the outside accessories are soldered to the jacket.

Part No. 3. The filling and overflow chamber is soldered over the 3 inch opening in the jacket and to the side of the tank. It provides space for expansion and contraction of the water in the jacket, figure 4.

Part No. 5. The strainer basket is made from the following items:

- a. Two pieces of clear white pine,  $13\frac{1}{16}$  inch thick, 3 inches wide, and  $14\frac{3}{4}$  inches long.
- b. One piece clear white pine,  $13\frac{1}{16}$  inch thick, 3 inches wide and

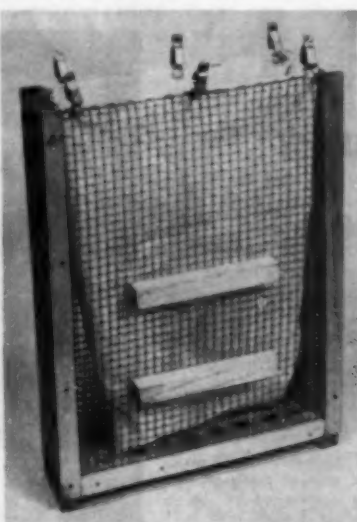


FIGURE 5. The strainer basket with the 90 mesh bag in place.

- $11\frac{1}{8}$  inches long.
- c. Four pieces white pine,  $13\frac{1}{16}$  inch square by  $5\frac{3}{4}$  inches long.
- d. Two pieces 20 gauge stainless steel angle 1 inch on a side and 2 inches long.
- e. Strips of white pine  $\frac{1}{4}$  inch thick by  $13\frac{1}{16}$  inch wide to cover all the edges of the hardware cloth.
- f. Two pieces of 3 or 4 mesh galvanized hardware cloth  $15\frac{3}{4}$  inches by  $11\frac{1}{8}$  inches.

Parts a and b are nailed together to make an open top frame  $3 \times 11\frac{1}{8} \times 15\frac{1}{2}$  inches. The blocks in item c are nailed to the screen and the screen to the frame. The smooth

edges of the screen are placed at the top or open end of the basket. The two pieces of 2 inch angle or small blocks of wood are used to form legs on the bottom of the basket, figure 5. The basket has a tendency to float when the tank is filled with honey. A hooked wire attached to the screen and slipped over the edge of the tank will prevent this from happening.

Part No. 6. A 90 mesh nylon or bolting-cloth bag is made 19 inches deep by 17 inches wide and is used for straining the hot honey. The bag is placed inside the basket and the basket in the tank between the end of the tank and the 4 pieces of angle. The top of the bag is held to the screen with small electric terminal clips.

Part No. 7. The thermostat is attached to the water jacket. It is set to hold the water in the jacket about  $175^{\circ}$  F. or other desired temperatures, figure 3.

Part No. 8. The screen for the bottom of the tank is made  $11\frac{1}{4}$  inches wide by 34 inches long using 3 or 4 mesh hardware cloth, wood strips  $\frac{1}{2}$  inch thick are nailed around the edge and across the screen. They are spaced so that each of the 60 pound cans will rest on 2 of the strips, figure 2.

To use the tank, fill the water jacket and  $\frac{1}{2}$  of the overflow chamber with hot water. Raise the corner of the tank a little where the overflow chamber is attached to be sure all the air is out of the jacket. **CAUTION:** Be sure the water jacket is filled with water before

(Just Turn The Page, Please)



turning on the electric current or the heating units may be destroyed.

If 60 pound cans of crystallized honey are to be liquefied, place them on the screen in the bottom of the tank and fill the tank to about  $\frac{3}{4}$  inch of the top with hot water, figure 3. Stir the honey at least once every 45 minutes to prevent the honey on the outside of the cans from burning. A long hardwood stick will serve as a stirring rod. Heat the honey to 140° F., then remove the honey, water and screen from the tank. Put the strainer in place and strain the honey through it. Continue heating the honey until it reaches 150° F. then turn off the heat. Let the honey stand about one hour, skim off the foam that rises to the top and bottle the honey.

To liquefy honey in bottles, place the bottles on the screen in the bottom of the tank and add warm water (not hot water) until it comes within 1 inch of the top of the bottles. Heat the honey until it reaches 145° F. then remove the bottles from the hot water. It is not necessary to loosen the lids on the bottles while being heated. If the bottles are filled too full some of the honey will run out and the bottles will have to be cleaned. This mess can be avoided by leaving the right amount of air space in the top of the bottles. When creamed honey is being prepared, the yeast that often causes fermentation in creamed honey is destroyed by heating the honey to 145° F. The hot water is drained from the jacket and replaced with cold water. The

seed for creamed honey is added to the pasteurized honey after it has cooled to room temperature or has dropped at least to 80° F.

Partially strained honey may be heated to 140° F. in the tank, skimmed to remove the foam, and then run into 60 pound cans. The honey is poured back through the strainer into the tank, heated to 150° F. and bottled.

This equipment, if used with care can make the job of heating, straining, and bottling honey for market a pleasant one rather than the messy one, that it often is, with poorly designed equipment. The quality of the honey will be a top grade if the directions are followed and a thermometer is used to maintain proper temperatures.

## The Beginner and His Bees

by W. W. Clarke, Jr.

Bill at last has enough questions from beginners to fill his page. But it has been a slow drag. At the start of the year it seemed like a good plan instead of rehashing seasonal advice. So, if you beginners want to ask Bill what to do about what, send in your questions. Also, if you will put some thought to it, what do you suggest by way of making this Department approach the beginner's problems in a new way next year.



From Carl Wright,  
Stanton, Texas

► I have several questions:

1. There are so many kinds of bees, Caucasians, Italians, and so on. Which should I choose?

2. Should I use two brood nests the first season, if I want to produce only enough honey to offset my costs?

3. What is the best way to market the honey? As a bulk comb, extracted, or comb honey?

4. When you requeen a colony is there any difference in requeening an

Italian colony compared with Caucasian or any other type?

5. How many colonies should one start with? Every source I consult has a different answer.

6. I live where a large amount of cotton poisoning is used. Will this harm my bees this summer?

•  
**Answer:** It is difficult to tell anyone which race of bees to purchase since, as in any livestock or other possessions, personal likes and prejudices enter into the choice. The Italian bees are used by a larger

number of beekeepers than any other race. There are probably several reasons for this choice such as: there are more breeders of Italians than of the other races making it easier to obtain and also giving more selection; more work has been done on breeding this race in order to improve the stock; and since more people are using this race it means that there is a better chance of pure mating if your bees should supersede.

The Caucasians have their advantages as they are supposed to be larger bees, very gentle, to work better, and winter better. They also have a few disadvantages such as



using larger amounts of propolis and burr comb. Frankly, the dark color is a disadvantage to me since I cannot locate a dark queen in a hive as quickly. Some of these same disadvantages also apply to the Carniolan which in addition has a reputation for excessive swarming. The answer may be in the newer hybrids, both yellow and dark.

To answer your second question I would certainly use the two brood nests even during the first year if that was my plan. Many of our smaller beekeepers prefer the story and a half hive. It may necessitate a little heavier feeding to build up a two story colony early, but I believe you can still produce a little surplus the first year and with the larger colony you should make up the difference in the second year.

In requeening it makes no difference what race of bees you use, the difference will begin to show up as soon as the new bees start to emerge.

We recommend that the beginner start with one or two colonies; probably two is better so that if something happens to one you can rob the other to help it along. As the beekeeper gets more experience and confidence he can increase in numbers.

I am afraid that you can expect some trouble from cotton poisoning. This has become a problem with most beekeepers in the country; if it isn't cotton being sprayed, it's legumes, fruits, vegetables, or berries. Care in locating the bees and close cooperation with the grower will lessen the danger from sprays.

I'm not sure that there is a *best* way to market honey. Most of our honey is sold as liquid or extracted, but there is a demand for finely crystallized and comb honey. I know that there is a big demand for bulk comb honey in the South, but the tendency for honeys to crystallize in the cold weather makes it impractical in some areas unless only enough is packed to last a few weeks. I would certainly try to meet the needs of the local market. The local market also dictates the fair price. Don't try to undersell nor oversell the prevailing price. It is well to remember that the market is always looking for a good product and will pay a certain premium if they think they are getting the best. I assume you will try to have the best.

From J. P. Zollinger,  
Brooklyn, New York

► Where does off-flavor come from? Last summer, despite the frightening drought here in the Northeast, I harvested the biggest honey crop from my five hives. I took off 240 lbs. and left at least as much on the hives for the winter feed.

But at least half of what I took off, though edible, is distinctly not good.

My hives are in a region of abandoned farm land now mostly reverted to woods, at the edge of the Catskill Mountains, Ulster County, N. Y. Most of the honey seems to come from trees and weeds.

In July and August last summer I noticed for the first time that the bees were constantly visiting a catalpa tree, long after the catalpa bloom was over and when there was hardly another flowering weed around. Would catalpa secretions be responsible for the large amount of off-flavor honey?

Answer: Your question on off-flavor honey is a tough one. We are able to identify by tasting a large number of the edible honeys and are able to recognize many of the honeys which are considered off-flavor in our area, but we often find those which cannot be identified. Honeydew, which is produced in large quantities in our mountainous areas, sometimes has a very objectional flavor. Many wild flowers and trees produce a honey of a different flavor which, although liked by some, is objectional to others.

Your suggestion: Catalpa, as a possible source of this off-flavor honey, interests me since it was only recently that a beekeeper in Pennsylvania reported that he obtained a surplus from catalpa last year and that it was rather light in color and a poor flavor. This could very easily be your problem plant.

We had another case in recent years when some off-flavor honey, at least to the taste of the producer, was disposed of with ease when it was suggested that this was something special. The following year the producer wondered where she could get more of the same. This suggests that what may be off-flavor to one person may not be to another.

I suppose you would recognize honeydew. It is normally cloudy in appearance and often dark in color. I have seen it when it resembled used motor oil and had a very objectional flavor.

I'm sorry we cannot be of more help, but possibly if we could see and taste a sample we would know a little more about the flavor.

From Dr. H. C. Hearlich  
Burlington, Vermont

► Can you tell me what kind of equipment can be used by the small beekeeper to mix in the starter for the Dyce process of crystallizing honey?

Answer: We make a lot of crystallized honey by the Dyce process and use only pots and pans we have in the kitchen. It is more convenient to use a tank with a honey-gate on the bottom for filling bottles, but even this isn't necessary. Be sure to heat your liquid honey in a double boiler arrangement to 140°F. in order to destroy yeast and melt any crystals; allow this honey to cool to room temperature or about 75°-80°F. before adding 5-10% starter. Mix the starter in with a large wooden spoon. (We made one out of a flat stick about three inches wide.) Be sure to get it mixed thoroughly. If you allow this mixture to stand for about 24 hours, any foam you have incorporated will come to the top and may be skimmed off. Bottle and place in your refrigerator or a cool place (about 57°) until firm. We have used an electric mixer at its lowest speed, but this will mix in more air than if the job is done by hand.

It seems to be that obtaining the starter is the hardest part. Commercially this is obtained by grinding crystallized honey. The small beekeeper can obtain it by buying it from one of these larger beekeepers or by getting a pound from a store to mix with his own honey. One pound mixed with five pounds of liquid and allowed to set in the refrigerator will make six pounds of seed. You can go on from there. It is possible to save this seed for only a short time as it has a tendency to get coarse. Actually good quality crystallized honey should be as smooth as liquid honey. When placed on the tongue the crystals are not at all apparent.



**SCIENCE EDITOR**  
**DR. WALTER ROTHENBUHLER**  
Iowa State College,  
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**INDUSTRY EDITOR**  
**ROBERT BANKER**  
Cannon Falls, Minnesota



## The Sterilization of American Foulbrood By Irradiation With Gamma Rays

by Herbert Studier

As a result of discussions with my brother, Dr. Martin H. Studier, senior chemist at Argonne National Laboratory, we decided to determine the feasibility of sterilizing equipment infected with American foulbrood by irradiation with gamma rays. M.H.S. arranged to have some foulbrood comb irradiated to various levels in the cobalt-60 irradiation facility of Dr. E. J. Hart in the chemistry division of the Argonne National Laboratory.

The experiment was begun in Marlow, Georgia on January 22, 1957. Eight healthy colonies of bees were involved in the experiment. Each of the four control colonies was inoculated with American foulbrood by being given a three-inch square piece of badly infected comb containing scales. The other four colonies were given similar pieces of comb which had previously been irradiated in a uniform gamma flux from cobalt-60 to levels of one hundred thousand, two hundred thousand, four hundred thousand, and one million roentgens respectively. In each case the diseased comb pieces were placed between the brood combs in such a way that the bees had to chew them out to restore bee space.

Observations were made as follows:  
*January 30, 1957*

1. One case of early disease in one control colony.
2. No sign of disease in any of the other seven colonies.

*February 5, 1957*

1. Disease was found in all four control colonies.

2. Early stages of AFB appeared to be present in the colony inoculated with AFB comb previously irradiated to one hundred thousand roentgens.

3. No disease apparent in the other three colonies.



*February 9, 1957*

1. Brown tongues of AFB evident in all four control colonies.

2. No disease could be found in any of the colonies which had received irradiated comb.

3. There was no longer any evidence of disease in the colony which had received diseased comb irradiated to one hundred thousand roentgens.

*February 14, 1957*

1. Terramycin was fed to the four control colonies since they were now all rotten with AFB.

*February 18, 1957*

1. Samples of AFB were removed from the four control colonies and sent to the Beltsville, Md. U. S. Bee Culture Laboratory where disease was subsequently confirmed as being AFB.

2. No evidence of disease was found in any of the four colonies inoculated with irradiated AFB.

*March 14, 1957*

1. Still no evidence of disease in

any of the four colonies which had received irradiated AFB.

2. The colony previously inoculated with AFB irradiated to one million roentgens was inoculated with another piece of diseased comb irradiated to only fifty thousand roentgens.

3. The colony previously inoculated with AFB irradiated to four hundred thousand roentgens was inoculated with another piece of diseased comb irradiated to only twenty-five thousand roentgens.

*March 26, 1957*

1. No disease apparent in the two freshly inoculated colonies.

*April 3, 1957*

1. The two colonies which had received the second inoculation with AFB comb irradiated to fifty thousand and twenty five thousand roentgens respectively were both badly diseased.

*April 20, 1957*

1. Disease getting worse in the two, twice inoculated colonies.

An earlier experiment, similar to the one described above, was started in Minnesota in September of 1956. However brood rearing had ceased and no disease became evident in any of the colonies. In this experiment the comb pieces were put into holes cut out of the combs in the hives. The bees cleaned out the scales and later (in Georgia) raised healthy brood in the irradiated combs.

We believe that the above experiments demonstrate the following:

1. That equipment containing the spores of AFB can be effectively sterilized if irradiated with cobalt-60 gamma rays to a level of one hundred thousand roentgens or greater.

2. Irradiation does not impair the combs for future brood rearing.

# ROYAL JELLY RESEARCH FOUNDATION ORGANIZED

by Garnett Puett and R. B. Willson

Twenty-seven producers and dealers of royal jelly met in Valdosta, Georgia, on April 4th and organized a group to promote research in royal jelly. The new organization has been named The Royal Jelly Research Foundation.

The meeting, which was prompted by the recognition of a need for valid medical research in the United States to discover the true nutritional and therapeutic value of royal jelly, resulted in the pledging by producers of \$20,000.00 worth of jelly to be channeled into research programs. Approximately half of this jelly will be delivered to the Foundation within six weeks and the balance is expected within six months. Plans are currently being made to begin by checking the validity of research previously done by European investigators. Some work is expected to begin almost immediately.

A few weeks ago a Washington, D. C. news agency released a story to the nation's newspapers which stated that work done on royal jelly in France and Italy was not supportable. This statement was quoted as being delivered to the agency by James I. Hambleton of the Federal Bee Culture Laboratory. Hambleton's statement seemed to indicate that this product of the beekeeping industry is of no value as a nutrient and that it is somewhat fraudulent to sell it in cosmetics. Discussion of the news release among producers of jelly brought them to the conclusion that competent research in this country is necessary if royal jelly is to continue to be a marketable product. While no producer has made any claims for jelly, there have been cases of testimony from individuals within the industry claiming beneficial results from the use of jelly. The need for an assembly to discuss the problem of research was expressed by several beekeepers through the American Bee Breeders Association.

R. B. Willson, after several telephone conversations with Garnett Puett, secretary of the ABBA, suggested that a meeting be arranged in Valdosta, Georgia. Telegrams were immediately sent to producers throughout the nation and, four days after the meeting was conceived, representatives of the industry convened. Though the meeting was held in Georgia, representatives from

other states outnumbered Georgians by almost two to one. George T. Hohmann flew from California to represent producers from that state. E. B. Ault drove straight through from Weslaco, Texas.

During six hours of almost uninterrupted work, the assembly chose a name, passed by-laws, and elected a board of directors to head the Foundation. The purpose of the foundation was stated as being to promote research in royal jelly. It was agreed that those unable to attend the first meeting might secure charter memberships by pledging to deliver one pound of jelly, or its monetary equivalent, within six months of April 30, 1958. Producers, dealers research organizations and all interested parties were declared eligible for membership.

It was agreed that funds for supporting desirable research work would come from pledges of royal jelly from producers and cash contributions from dealers. At the meeting itself more than \$10,000 worth of royal jelly was pledged immediately and it is estimated that when all other producers of royal jelly are solicited that the Foundation will have funds available of approximately \$20,000 for the first year.

The Board decided to accept dealer memberships in the Foundation at \$500.00 per year. The Board welcomes applications from dealers for membership. The support of the entire beekeeping industry is solicited by the Foundation. The Directors welcome suggestions from all.

The Board of Directors of the Foundation were chosen by secret ballot. They were selected with considerable emphasis on the section of the nation which they represent. R. B. Willson, George T. Hohmann, E. B. Ault, L. H. Little, and Garnett Puett were chosen to the board. After instructing the board to exercise discretion and to proceed carefully, the assembly authorized the board to begin at once to collect jelly and to make plans for converting it to funds for research.

Following the general assembly, the directors gathered and named R. B. Willson as chairman. George Hohmann was selected secretary, and L. H. Little was chosen vice-chairman and administrator of both the jelly and funds of the Foundation. The board agreed to make no sale of jelly

nor to enter into any research program unless there is agreement among four of the five members.

Mr. Willson reported, that ready for our support and sponsorship, there are two pieces of medical research work already under way and that two others are in the process of negotiation. Favorable results from any one of these pieces of work would result in a radically changed attitude towards royal jelly by the medical profession and government authorities. Members will be kept informed of these developments by direct communications from the Board.

R. B. Willson received authorization to proceed with steps preliminary to initiating certain research with jelly this spring. If affirmative results are obtained, publication will follow as soon as possible. It is hoped that valid proof of the value of royal jelly will be uncovered as additional pledges and contributions are made to the Foundation. Recognized medical researchers only will be supported with funds from the organization after screening and selection by the Board of Directors. Should results be negative, producers will have the satisfaction of having proved so by scientific research rather than by hearsay evidence or opinion.

It was agreed that no research project would be started without the unanimous approval of the Board and that no money would be spent except on projects where it was agreed by the scientists involved that results would be offered for publication in a scientific journal of high standing.

The Board met after the general meeting was adjourned. Pending the drafting and final approval of the constitution and by-laws the Board was empowered to act with authority for the Foundation, it being the consensus that no time should be lost in starting medical research work.

Officers on the Board will serve without compensation.

Those attending the Valdosta meeting were: George E. Curtis, LaBelle, Florida; J. J. Scott, Winsboro, La.; J. L. O'Ferrell, LaBelle, Fla.; George T. Hohmann, Napa, Calif.; Clarence Jackson, Funston, Ga.; Leslie M. Lewis, Havana, Fla.; L. H. Little, Shelbyville, Tenn.; Harvey F. York, Jr., Jesup, Ga.; N. C. Jensen, Macon, Miss.; Paul Cutts, Chipley, Fla.;

(Turn to next page)



Kermit Anderson, Ruskin, Fla.; G. M. Zeigler, Jr., Stockton, Ga.; Garrett Puett, Hahira, Ga.; Marvin Brown, Plant City, Fla.; David C. Phillips, Clearwater, Fla.; J. H. Moody, Prattville, Ala.; A. V. Dowling, Valdosta, Ga.; Clinton C. Berry, Montgomery, Ala.; E. B. Ault, Weslaco, Texas; Hubert T. Faulk, El Paso, Texas; R. B. Herier, Springfield, Ohio; Daniel S. Flowers, Jesup, Ga.; J. R. Eubanks, Ruskin, Fla.; R. B. Willson, New York, N.Y.; George Riner, Robert Carroll, and William Farmer, all of Sylvester, Ga.



### Now It's Doctor L'Arrivee

J. C. M. L'Arrivee of the Experimental Farm staff completed his studies at the Iowa State College, Ames, during the past winter and on March 21, the degree of Doctor of Philosophy was conferred. His major field of study was apiculture and his minor was taken in genetics.

At the University of Manitoba, Dr. L'Arrivee obtained his Bachelor's degree in 1951 and the degree of Master of Science in 1953. His work at the Experimental Farm is in the field of apiculture, including pollination studies with honey bees. As a student, he was employed two seasons at the Experimental Farm and worked in apiculture in association with the late Ed. Braun. He joined the staff in 1956 as Research Officer in Apiculture.

He is a member of the Agricultural Institute of Canada; Entomological Society of America and the American Genetic Association, and the honorary societies GAMMA SIGMA

DELTA and SIGMA XI. During the war, he served in the R.C.A.F.

Dr. L'Arrivee was born at St. Boniface, and married Catherine Cassidy of Charleswood in 1950. They have a family of three girls and a boy.

### The Nectar Flow as a Source of Bacteriophage for E.F.B. Control

V. I. Krasikova (Beekeeping Institute, U.S.S.R.). *Pchelovodstvo* 1956, 43-9; *Bee World* 38, 295-6 (1957).

A bacteriophage has been found in the nectar from flowers of a number of species which is active against *Bacillus alvei* but not against *B. plauti* or *Streptococcus apis*. The potency varies with the flower species and from year to year. In localities with an abundant nectar flow, E.F.B. infection disappeared in 91.9% and reappeared in the fall in only 14.7% of the cases tested. Over the same period of time (1949, 1950, and 1951) where colonies were fed with sugar sirup, the infection in the summer months diminished only in 10.8% and reappeared in the fall in 83.4% of the test colonies. Washings from healthy larvae in the colonies affected with E.F.B. also showed the presence of a potent bacteriophage.

—F. B. Wells

### Government Help For Honey In Canada

The Canadian Bee Journal announces a three month publicity campaign for honey in Canada commencing in April, according to the Canadian Beekeeping Council.

The Dominion Government is to provide \$15,000 which will cover most of the cost, but naturally, the success of the program depends to what extent it is co-operated with on the part of the beekeepers themselves and their organizations.

Of the publicity funds, \$3,000 is to go to the American Honey Institute for a special program of releases to magazines, newspapers and radio, as well as contact with home economic specialists, educators and advisors. Display material, streamers, recipe booklets, etc., are to be provided.

Also large commercial concerns like Kellogg, Kraft, etc. are volunteering to be a part of the program, as is the Dominion Department of Agriculture which is to send out through its consumer section, releases and pictures featuring honey to all radio stations and newspapers in Canada.

### Donations Sought for Royal Jelly Study

Richard L. Rubottom, of Powder River Apiaries, Buffalo, Wyoming, has a son, Richard Rubottom, who is a medical student at the University of Iowa, and Richard has just told us that research work is being started at the University on royal jelly under the direction of Dr. Helen Dawson. They need donations of jelly for this project.

May we suggest that this is an opportunity we have been waiting for. If you wish to help, especially you beekeepers who are in the business of producing jelly, send some jelly for this work which may soon be of great benefit to you and to the industry.

Address your shipments to Dr. Helen Dawson, Department of Anatomy, State University of Iowa, Iowa City, Iowa.



### E. G. LeStourgeon

Mr. E. G. LeStourgeon, 79, passed away on March 11 at Houston, Texas. Burial services were held at San Antonio on March 13.

As a lad Guy served in the Spanish-American War with the Rough Rider Regiment under Col. Roosevelt.

LeStourgeon, operated a series of apiaries in Bexar, Medina and Frio Counties in the early years and a bee supply agency in San Antonio prior to 1917. In 1917 he became Manager of the Texas Honey Producers Association. He served a term as Representative in the Texas State Legis-



lature and was instrumental in procuring appropriation for Apiary Investigations and Apiary Inspection Service.

During the most active years of his life, he was a leader and official in various beekeeping organizations—American Honey Producers League, American Honey Institute, Southern States Beekeepers Conference and Texas Beekeepers Association.

Mr. LeSturgeon was a talented writer and speaker. In 1924 he became Editor and Manager of BEEKEEPERS ITEM until 1946 when he retired due to failing health. He is survived by one daughter, two grandchildren, two sisters, and several nephews.

A. H. Alex

Yes, here was a dynamic personality in the early years of the century, loved by all. I remember a happy trip with Guy and Jess Dalton through the "Sugar Bowl" of Louisiana just previous to the great flood

as well as a visit to our place and my home after the Omaha National Convention. The group went out on the Mississippi ice (20 below) to watch some fishermen pull in their gill nets of fish. While he and other Southerners in the group shivered in their light clothes, Guy was as ever the pep and gaiety of the party.

We have missed the letters from Guy since he severed his connection with "Beekeepers' Item."

#### Red Face Again

Dr. R. L. Parker, Kansas State College, calls attention to an error in the article in January, "ABJ Experimental Apiaries," where in the next to the last paragraph it says that gallimycin is a good control for American foulbrood. That is decidedly wrong. It shows good control for European foulbrood. Either gallimycin or tetracycline will prevent European. So—maybe now our face is not so red.

#### Folk Medicine

Our readers will recall the series of articles in the American Bee Journal on honey as a food and medicine by Dr. D. C. Jarvis of Barre, Vermont. He is now out with a cloth bound book of 182 pages entitled "Folk Medicine." The book is based on keen observation of Dr. Jarvis as well as on the folk lore and general practice of the Vermont people.

Honey plays a very important part in that folk lore and Dr. Jarvis devotes a whole chapter to the value of honey as to the health as well as referring to it generally, throughout the book. Dr. Jarvis is a member of the A.M.A. He stresses the medical reasoning behind folk medicine in Vermont. His arguments and facts are impressive. We recommend the book to our readers. Price is \$2.95 and it may be obtained from the author or from the publishers, Henry Holt Company, 383 Madison Ave., New York, N.Y.

## LOST IN THE WOODS

by Clare D. Floyd

There is a saying to the effect that—we can't see the forest for the trees. Wonder could it apply to some of our beekeepers. In the field of honey merchandising, what are some of the "trees"—trees which might at first appear to be important to the business of honey marketing. Let us stop long enough to study our problem and look at these "trees" one at a time.

Honey is like a precious gem, "a gem in the rough," in the grocery merchandising picture in our modern super markets.

For a number of years, some people in the industry have been concerned over the popularity of our product, honey, in the grocery trade. It has been generally believed that honey is a slow-moving item rather unpopular compared to other grocery items. Some call honey a luxury item. This in a sense has been true. It has, however, not been the fault of the honey, but rather the beekeeper or the packer who has done a poor job of merchandising. Honey has often lacked class, especially when it is packed in strictly economy containers and frequently very inadequately labeled. As a result, the product has been relegated to second and third rate shelf positions because its competitors, jams, jellies, etc. had so much more sales appeal.

The picture today has changed in many areas. Modern packaging by



sound business men has revamped the appearance of our product so that when it is given a good location with equal shelf frontage, it frequently holds its own with more highly advertised products.

Recent surveys show in midwest super markets (January, 1958), honey accounted for ten per cent of all sales made in the jams, jellies, and spreads section of super markets. This averaged better than \$20.00 per week per store with an average margin of profit of better than forty

per cent while other competitive items showed profits of from 15 to 25 per cent. The margin on syrups averaged only 17½ per cent and molasses only 20 per cent. Honey at present certainly occupies an enviable position in modern grocery merchandising.

Let us not lose sight of the forest, however. Honey is not sold until it has been consumed by the public. Nowhere along the line from the hive until the honey is used must there develop a bottle-neck that will discourage the acceptance and use of our product. There is undeniable evidence that honey is an acceptable item in the super market. What then can possibly discourage sales? It adds up to only one thing and that is failure to recognize the need for superb quality in the pack.

Every honey producer who harvests more honey than his family can eat, knows that there is often a wide array of different kinds and qualities of honey produced, depending upon the source and the time of harvest. The producer, in fact even a beginner in beekeeping, recognizes a difference in quality of various lots of honey. It has been the policy over the years to blend these several lots together hoping that the best product will help dispose of the secondary item. This is poor management, another tree getting in the way.

(Just turn the page)

Blending is a recognized important practice when it is practiced to maintain an even *high quality* over the year. Blending, to modify strong and frequently off-flavored honey so that it may be sold through table honey channels, should be discouraged.

Confident of superb quality, what steps can be taken to assure acceptance and repeated sales. Sales are the result of a planned attack. They do not just happen. Modern food selling is a terrific struggle of motivating influences, instigated by competitors of real stature. Although honey has many natural attributes, of great value in a campaign of this kind, there is a definite need for better understanding of honey marketing and for organizing the industry in a co-ordinated program.

A sale is the climax of an influence which has brought together the customer and the article. Consumption of this sale is the result if he or she desires the item sufficiently to be willing to part with the cost. In the case of honey, the customer should be so motivated as to plan for its use when it reaches the home.

If we consider these acts step by step, we can encourage the first action through educational talks on radio and television whenever an opportunity presents itself. The life of the bee for example is tremendously interesting and stirs the subconscious mind to remind the shopper to look for honey. Other mediums, billboards, etc. although very important, are almost out of reach at present.

Our next logical challenge is to stop the shopper in the aisle of the market by a suitable influence so she may recognize and wish to buy honey. This can be accomplished by good point of purchase material suitably displayed. Two kinds are usually seen in modern markets; brand advertising and nonbrand material such as is available through the Federation and the American Honey Institute. Nonbrand posters and shelf talkers will have the best acceptance and will create the least antagonism.

Remember this is the final battle in the struggle to merchandise the product. Over 70 per cent of all grocery sales are decided in the aisle of the store. "What fertile soil to work in." Good point of sale material should:

1. Point up a honey display, "really put it over."
2. Remind the customer of adver-

tising she saw somewhere or heard about over the radio.

3. Suggest a timely use for honey as a spread or in a recipe.
4. Generally have a place for the price.

With this type of effort carried to completion, increased sales are bound to result. If such a program is backed by integrity of quality, repeat business can decrease unit costs of promotion effort of this kind.

Where and how to get the best out of point of purchase material occasionally raises a question.

Point of purchase material is wasted in cluttered and dirty surroundings. Customers are distracted and they lose their buying impulse. Advertising pieces should be placed properly so as to be a part of the display, firmly in the position and tastefully arranged. Avoid crowding. When the sales event is over, remove the material; leaving such material up is a serious weakness especially when the display has been removed.

Properly used point of purchase material will help us win the battle for more table honey sales.

Another tree that stands in our way can be thought of as honey users. The housewife believes her job lacks glamour. When recipes are offered they should be seasonal in nature, be simple to prepare, and cater to children as well as adults. Bear in mind, honey is healthful and the health of the children is of prime concern.

Recipes that "spot light" the flavor of honey appeal to the gourmet. Salads, beverages and chilled desserts are naturals, providing great opportunities. Honey in lunches for the man of the house and for the school age group. In combinations with peanut butter, certain cheeses and with some dried fruits such as raisins, creamed honey makes a tasty, healthful sandwich. Honey can give to meat dishes, such as ham and chicken, a delicate flavor that will be a real reward.

You may well ask how about our amber fall honeys. How can they be disposed of?

Honey that possesses a *natural* flavor and odor not suitable for table use is needed in the commercial trade. The demand for this honey is good; the price almost equals that of table honey. Such honeys should be reserved for this market.

Large commercial users of honey have expressed genuine disappointment when purchasing honey direct

from producers because of the wide variety of color, flavor and density they have encountered. Some users have ceased to use our product because of the wide differences that exist. Bakers for example require honey of similar consistency week after week so that it does not present a hazard to their baking operations. Honey of a more pronounced flavor is well suited for the baking industry and should not be channeled into table-honey market if such flavors are radically different.

Commercial users of honey expect honey in the liquid form. Unless a supplier is equipped with facilities to deliver the product in this condition, it might be best that he avoid this channel of trade. Commercial users at present demand white to light amber honey providing the density is fairly constant.

Direct selling from the producer to the commercial trade has provided a very disturbing element in orderly marketing for a number of reasons.

1. Producers prefer to sell their honey in one or two sales rather than making delivery at regular periods throughout the year. This usually results in the purchaser having to locate another source of supply in the late months before the new crop arrives.

2. Producers in general are not equipped to deliver honey in liquid condition of similar density throughout the season.

3. Producers frequently fail to realize, this service to the trade costs money and as a result frequently offer their product to commercial users at the same rate that packers are paying. Such bargain lots of honey confuses the buyers of commercial honey and disrupts an orderly marketing plan.

4. Buyers of commercial honey constantly seek bargain lots of honey. In so doing, they oftentimes secure honey that is almost too white and mild to do a satisfactory job in their formula.

5. Direct sales to commercial users by producers has firmly introduced white table honey to this market at prices often below the level of commercial honey in the regular trade channels.

Yes, don't you agree? Some of us cannot see the forest for the trees—trees that are proving to be a mirage on the horizon of the fast changing picture of honey marketing. Minnesota

# QUALITY BEES

**Italians or Caucasians**

We have had a very unfavorable Spring here this year but conditions have improved and we should be able to handle your orders with our usual prompt attention.

## Prices To May 20th

Lots of	Queens	2 Lb. and Q.	3 Lb. and Q.	4 Lb. and Q.	5 Lb. and Q.
1 - 24	\$1.50	\$4.25	\$5.35	\$6.45	\$7.55
25 - 99	1.40	4.00	5.05	6.10	7.15
100 - 499	1.30	3.75	4.75	5.75	6.75

**Tested Queens \$2.50 each**

## Prices After May 20th

Lots of	Queens	2 Lb. and Q.	3 Lb. and Q.	4 Lb. and Q.	5 Lb. and Q.
1 - 24	\$1.00	\$3.85	\$4.70	\$5.55	\$6.35
25 - 499	.90	3.35	4.20	5.05	5.85

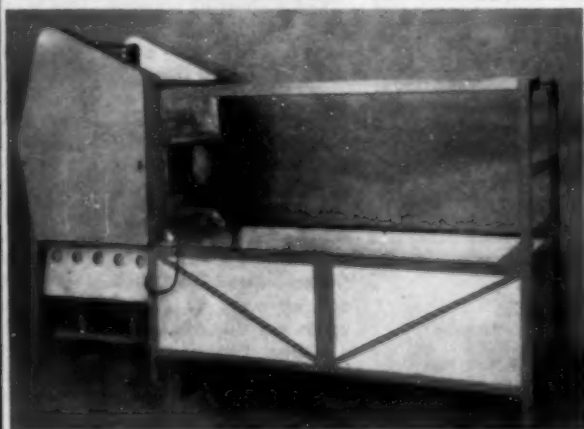
**Tested Queens \$2.00 each**

Queens Postpaid - Airmailed and/or Clipped—No Extra Cost  
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## THE STOVER APIARIES

**MAYHEW**

**MISSISSIPPI**



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**Tried and proven - low initial cost -**  
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Self contained heater and settling tank; only one motor; simple to maintain; safe to use; frames won't break; frames cleaned and returned to top for discharge; every comb uniformly uncapped.

If you want to reduce your costs in handling honey, look into the savings from the use of the Crawford Uncapper. Limited quantity available for immediate delivery in both stainless and galvanized.

WRITE TO:

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P.O. 581

WOODLAND, CALIFORNIA



# How To Do It



Address "How To Do It," American Bee Journal, Hamilton, Illinois.

The number one choice will receive a three year subscription extension; numbers 2, 3, and 4 will receive a full year each; numbers 5, 6, and 7 a six month extension each. Balance two months each.

Sometimes there are more items than can be used in one issue (as for this month). Those left over will be considered the following month.

## Number One

### A Useful Box

For several years, I have used an improvised 8-frame hive body called a swarm box. The top is fitted with a hinged frame and covered with screen. The bottom is covered with a piece of plywood which extends 2 inches in front. An opening is made in the front, 2 inches by 6 inches, and has a hinged door with hooks for closure or opening.

During swarming season a hanging swarm can easily be shaken directly in the top. Bees can be shaken into it from the bee yard for whatever purpose you may have for additional bees. The screened top prevents suffocation even in the hottest weather. Frames of brood can be inserted, and the box placed on the ground will induce swarms on the ground to go in and can be covered with a lid for temporary domicile. This has been a valuable piece of equipment and is carried with the other equipment during the season.

Keith Hudson  
Fairbury, Nebraska

## Number Two

### Slumgum Handling

Pour hot slumgum from the melter into an ordinary cardboard box like one used for five pound jars. When the box is full and the slumgum has hardened, tear away the paper and you have a cake that can be stored like cordwood until rendering time. Incidentally, rendering firms sometimes pay a premium for slumgum not in sixty pound cans.

Al Bzenko  
Rochester, Mich.

## Number Three

### A Honey Tin Feeder

When using a tin as a syrup feeder - see page 94 - try punching one single nail hole in the bottom of the tin instead of holes in the lid. The punch should be made from outside inward so that a small burr is made inside. Into this burr fit a nail with a flat head which will cover the burr and swing easily in the hole. When this feeder is placed over the frames of bees it can be filled at will without moving it. When holes are made in the lid the tin must be inverted and removed each time for filling. Some bees will always cling to the lid and have to be brushed off or if left on, may be crushed when the feeder is replaced.

If a wooden platform is contrived which is slightly larger than the base of the tin and with a center hole large enough to cover two or more seams of bees, but of course smaller than the base of the feeder, it will enable more bees to gain access to the syrup. It will be found that the bees remove the syrup from the single hole quickly when they need the food and if the lid of the tin fits properly there will be no leaking of the syrup if it is not used immediately. Novices will find this feeder a great convenience.

M. M. Hooper  
Malvern, England

## Number Four

### Hiving A Natural Swarm

The simplest and easiest way to hive a natural swarm is to place an empty super, without frames, on top of the brood chamber; shake the swarm into this shell; put on the cover and go about your business. The super shell may be removed later or frames of foundation or drawn combs can be installed at the proper time.

W. A. Harbison,  
Texas

## Number Five

### Beat Granulation

I am an amateur beekeeper and make some section and chunk comb

honey. Several years ago in trying to figure how to keep it without having it granulate, I hit on the idea of freezing it. I put the sections in cellophane wrappers and the chunks I wrap in waxed paper and put in the freezer. I have kept it as long as a year and it comes out apparently in the same condition, just as fluid as when it goes in. Possibly this may be of some value to the industry.

Harry B. Hooper,  
California

## Number Six

### Windbreak for Comfort

Do you sometimes find it necessary to work bees on a windy day, especially when your smoker does not do much good and no nectar is coming in? There is a simple way to take care of this situation. Just set up a windbreak and work in comfort.

Get a sheet of plywood. One about four feet by six feet is light and easy to carry. Get a light steel post with an anchor plate near the bottom, such as farmers use for electric fences. They are available at most farm-supply stores. Unless the ground is dry or stony you will not need a hammer; a push with your foot on the anchor plate will set the post. This supplies a support for the plywood sheet which should be leaned against the post with enough incline so it will not fall over. This should be on the windward side of the hive to provide a shelter. You can then put the smoke where you want it. The bees are more docile and you can work in comfort.

A handle can be fastened to one side of the sheet with small screws or stove bolts for convenience in carrying; or a handhole near one edge will serve the same purpose.

Robert R. Ward  
Fort Atkinson, Wis.

## Number Seven

### To Keep Ants Out

Take the bottom board off the hive and turn it upside down. Put a sturdy nail in each corner of the bottom board, one that will support the hive

well without splitting the cleat of the board. Then turn the bottom board over the way it should be on four jar tops with the nail heads resting in their centers. Fill the tops with oil and the ants can't crawl up to the hive without passing through the oil and they won't do this.

Joe Robbins  
Signal Mountain, Penn.

#### Increased Efficiency

For each 100 colonies in standard ten frame equipment, four stories high, 400 hive bodies are needed and 4,000 frames. After the combs have been drawn you get better ventilation, easier manipulation, and fatter combs of honey by using only nine frames to the hive body. By getting more bodies, covers, and bottoms for the 400 combs you have thus gained, you can operate about 45 more colonies. You gain almost an entire yard. If the bees fill the hives this is an increase of better than two tons of honey.

Harry T. Starnes,  
Indiana

#### Thumb Tack Container

Many beekeepers use thumb tacks to mark brood chambers, mark undesirable frames and so on. Such tacks generally are sold in flimsy cardboard boxes and after one has carried them in his pants pocket a few hours, they are scattered among the other items of the pocket, not to mention the points which work through the pocket and into the leg of the beekeeper. I use a one ounce glass bottle with a metal screw top to carry this item and find it overcomes all of the trouble of the original container.

E. F. Bea,  
Minnesota

#### UNDERCURRENT

The Undercurrent page is not in this issue for two reasons. First we really did need the room for advertising; and there were too few contributions for a full page. So, pardon us, good friends. What you sent will be in the page next time. Meanwhile why don't some of the rest of you send in answers to the same question: How Can We Increase the Demand for Honey Outside the "Pancake" Months?



Dadant Starline  
Hybrid Queens  
1 - 24 ..... \$1.70  
25 - 99 ..... 1.60  
100 - up ..... 1.50

Bordelon's Light  
Italian Queens  
1 - 24 ..... \$1.25  
25 - 99 ..... 1.15  
100 - up ..... 1.05



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Since you are a beekeeper you know the beekeepers near you. Why not be an agent for the American Bee Journal? Since it is your favorite magazine, why not do your friends a good turn and, at the same time, help yourself?

Write for particulars.

**AMERICAN BEE JOURNAL, Hamilton, Illinois**

#### DARK ITALIAN QUEENS

We still have plenty of open dates for May delivery  
NO MORE PACKAGE ORDERS. THANKS.

**Weaver Apiaries**

**Navasota, Texas**

#### SMITH'S BEES

We will have plenty of packages during May.

Get our prices for May 10th. and later delivery of our superior bees. Help your weak colonies with booster bees. Write for our prices at once.

**N. B. Smith & Co., Calhoun, Alabama**

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Our honey labels will tell your honey story, by word and picture to encourage sales. Our sample catalog is yours for the asking.

Each label in complete color and each one separate (an actual label) to put on your container to see how it looks.

**AMERICAN BEE JOURNAL**

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## Three Band and Pure Italian Hybrid Package Bees and Queens



We Ship Pure Worker Bees By Mail, Express or Truck — With Queens Introduced or Not Whichever You Like.

*We Guarantee Live Arrival*

### 1958 Prices

Each with a young Laying Queen

Lots of	2 lbs.	3 lbs.	4 lbs.	5 lbs.
1 to 11 Each	\$4.25	\$5.35	\$6.45	\$7.55
12 to 20 Each	4.05	5.10	6.15	7.20
30 or More Each	3.85	4.85	5.85	6.80

Tested Queens—\$2.00

## JACKSON APIARIES

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**Oldest Shipper in South — Thousands of Nuclei and Colonies — Experience Counts**

# Berry's "Old Reliable" Italian Bees Preferred by Leading Honey Producers

INSURE your honey crop with **DEPENDABLE BERRY BEES**. After sixty-three years of breeding and selection our strain of Italian bees is unsurpassed by any stock, Hybrid or otherwise, for honey production, disease and Nosema resistance "OLD RE-

LIABLE" bees assure you that you have the best to be found. We maintain several branches in the Northwest States to test our strain for both climate and honey production. When a better stock is produced "Old Reliable" will be its name.

### PRICES THRU MAY 20th:

Quantity	Queens	2 lb. w/q.	3 lb. w/q.	4 lb. w/q.	5 lb. w/q.
1-24	\$1.40	\$4.50	\$5.60	\$6.75	\$7.85
24-99	1.30	4.25	5.35	6.45	7.55
100 up	1.20	4.00	5.10	6.20	7.30

### PRICES AFTER MAY 20th:

1-24	1.20	4.00	5.00	6.00	7.00
25-99	1.10	3.75	4.75	5.75	6.75
100 up	1.00	3.50	4.50	5.50	6.50

For prices on queenless packages deduct \$1.00 from price of queen; all prices F.O.B. Montgomery, Ala.

All our queens are selected; we have only one grade. Wings of queens are clipped free, on request. 90% of the bees in our packages are under ten days old. All orders will be filled on the dot unless weather makes it impossible. We have no disease. Our apiaries

were the first in the state to be inspected and were found to be absolutely clean. Directions for handling and a Certificate of Health come with each shipment. Deposit of \$1.00 per package required for booking; remainder of remittance in full, ten days before shipping.

References: Union Bank & Trust Co., Montgomery, Ala. Any Bee Journal in U. S. or Canada; any Extension Agent.

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**Sixty-three Years with the Bees — Accredited and Certified — The Best in America**





# Your Questions Answered —

## Caucasians

From Charles J. Benes,  
Thompson, Ohio

I have done, side by side, hive by hive, trials with good Italian colonies and with good Caucasian colonies. We find the black race to be superior honey gatherers. They work at least two hours a day more. We have pure Caucasians that propolize less than Italians. We have only one colony of Caucasians, out of twenty that propolize heavily.

However I find that the dark bees we have (and I am not referring to hybrids) are not easily subdued by smoke like the Italians. However, they winter better and consume less honey. We have never lost them during swarming time but we have lost quite a few Italians.

We do not use a double brood chamber or queen excluders. Do you feel it would be to my advantage to use them?

This year we intend to requeen several hundred colonies with Caucasians. Yet it seems that marked dark queens are sometimes balled during introduction. How may I quickly locate the dark queens in dark colonies? What is the best way to introduce the dark queens to dark colonies? How may I requeen the dark colonies from June to August without dequeening? The only true honey-flow here in northeastern Ohio is from September to November.

Are Quinby size hive bodies or three ten frame bodies necessary for the brood chamber when using Carniolan bees?

*Answer*

Your experience with Caucasians is about the same as some of our experiences with them. I do not know, however, why they should be cross if they are real Caucasians. That is surprising.

I do not think it would be of any value to you to use a queen excluder.

The only way I can answer your question about whether or not you would like the double brood chambers is that we prefer them. My bees are in Dadant hives, and I use one hive body and a super as a standard brood-nest equipment and a reversal plan of management. We have

some regular standard 10-frame hive bodies with two hive bodies for brood, and sometimes three all year round with a reversal plan. The reversal plan in this way produces more bees and more brood and larger colonies.

About locating the queens of dark bees, try using a daub of finger nail polish or quick drying enamel on the queen and preferably aluminum enamel and you can find them very easily. I have had no trouble with balling when the painting is done right. It is the only way I know of to locate them with any ease.

I do not know of any way to requeen without dequeening. I wish I did. I have been working on this for years, and have not found a satisfactory way yet. Most of my requeening is done with a push-in cage. It is more satisfactory, with good results. Might try the two queen method.

We use the same management for Carniolan bees, Caucasian bees and Italian bees. Also it might interest you to know that all of our bees are hybrids and not straight racial lines.

## Fumidil in a Dust Mixture

From Richard F. Harris,  
Westminster, California

In the January issue under "ABJ Experimental Apiaries" you indicate that research has brought added defense against disease from the use of drugs in a dust to control both European and American foulbrood. Is it your opinion that Fumidil can also be added to the dust mixture? If so, in what proportions?

*Answer*

Fumagillin is of no value at all in dust because it is not effective against the brood diseases, but only against the adult disease, Nosema. We have tried it, and also the Abbott Laboratories that manufacture it have tried it, and we cannot come up with any particular value to using the dry fumagillin in the dust. It is much more effective when used in a liquid syrup and fed continuously in proven cases of severe Nosema infection in adult bees. It is also valuable in a syrup used in feeding new package bees to cleanse them of any Nosema they may have brought with them in the shipment.

## How to Make Creamed Honey and Peanut Butter-Honey Mix

From Mrs. F. Pickering,  
Crane, Montana

I would like the method for making creamed honey and also for making a mixture of peanut butter and honey.

*Answer*

From Harriett M. Grace  
American Honey Institute

We suggest to make the peanut butter and honey mix that you experiment yourself by mixing the two until you get the right consistency and flavor.

We are also enclosing a copy of our leaflet Honey Jellies and Marmalades, Honey for Canning and Preserving and a few others.

Here is the recipe for creamed honey:

### CREAMED HONEY

Creamed honey is honey granulated with a soft creamy texture, the granules being extremely small. Some honeys originally granulate with fine granules. Several methods of preparing creamed honey have been developed which vary slightly. By the most approved plan, extracted honey is heated to destroy yeasts and to melt all crystals, then cooled to about 80°F. Slightly more than 5 per cent of ground crystallized honey or previously processed finely crystallized honey is added and thoroughly mixed after which the honey is placed in its ultimate containers and placed in storage at about 57° until fully crystallized. It is then removed to ordinary room temperatures except for honeys high in levulose content which tend to soften and liquefy at room temperatures. This is the Dyce process and the Cornell Research Foundation, Ithaca, New York, should be consulted regarding patent rights on their process for making creamed honey.

It's time for questions again. Next month "All Around the Bee Yard." Then recipes. Send your questions, or your recipes. The latter, on publication, will be paid for in subscription.

## May is Here--

**Have your bees arrived?**

**Is your order in for future shipment?**

Queen production was delayed at the start, due to weather. We hope this has been overcome by the time you read this. We are doing our best to this end. For prices read April ads.

### (J. G.) ROSSMAN APIARIES

Res. Phone YUkon 5-6660

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Moultrie, Ga.



Do you know any 4-H club members or any other young people interested in starting beekeeping?

Our carefully selected needed items shown above are ideal for new beginners. Reasonably priced, full description listed on page 6 of our new 1958 catalog.

Write to us at any of our convenient branches or consult the dealer near you.

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#### PACKAGE BEES ITALIAN QUEENS

\$1.40 Each (up to 50)  
In larger lots, write for prices  
Queens raised from heavy-producing  
stock. Health Certificate  
BEES— 2-lbs. \$4.25 3-lbs. \$5.35  
What have you to trade?

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Science is International. So is Bee  
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Make this year's crop with  
Dadant's Starline Queens.  
This strain has a scientific  
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**Experienced Beekeepers  
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#### CONNEAUT 60 lb. Cans

"Best By Test"  
Handled By Leading Jobbers  
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#### PACKAGE BEES ITALIAN QUEENS

Good Producers — Gentle  
You Will Like Them.

**A. R. BANTA**  
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#### Italian Bees and Queens

2 lbs. with queen	1 - 24	25 and over
3 lbs. with queen	\$4.00	\$3.80
Queens	4.75	4.50
	1.25	1.20

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CONCORD NORTH CAROLINA

#### CAUCASIAN and ITALIAN BEES

Three or four frame nucs, lots of 10  
or in truckloads. Help pick them and  
be satisfied. Packages and queens also.

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#### QUALITY ITALIAN Packages and Queens for 1958

2 lb. with young queen \$3.25  
3 lb. with young queen 4.50  
Extra Queens (Air Mail) .50  
**WILKES APIARIES**

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Quality and Quantity  
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**Overbey Apiaries**

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Bright 3-banded Italian bees and queens.  
Our bees are the very best you can buy.

Queens 2 lb. pkg./q. 3 lb. pkg./q.  
1 to 50...\$1.25 \$4.25 \$5.25  
50 up...\$1.10 \$4.00 \$5.00  
We guarantee safe delivery.

Packages F.O.B. - Queens Prepaid  
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## LITTLE'S

### ITALIAN QUEENS

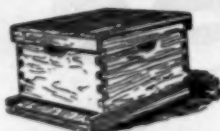
1 to 24	\$1.45
25 to 99	1.35
100 and Up	1.25

Until June 15

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Bulk & Capsules  
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**Williams Bros. Mfg. Co.**  
5205 SE 82 AVENUE  
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## Bright 3 Banded Italian Queens

AIRMAILED

1 to 24	\$1.10
25 to 99	1.05
100 up	1.00 ea.

Shipments began April 25

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Belton, S. C.

Successor to C. G. Ellison & Sons

## Yellow Italian Bees and Queens

Known the world over for their gentleness and heavy producing ability. We guarantee prompt, safe delivery. Health certificate assured. Shipping starts April 16.

2 lbs. with queen	\$3.50
3 lbs. with queen	\$4.50

Young Queens \$1.00 each, airmail

## JOHNNIE ARNOUVILLE

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Honey Bee Microslides - Worker Honey Bee, Set No. 3 whole mount of Worker and a series of eleven slides, showing the structure of each part of the insect.

With descriptive leaflet and box, \$5.25 per set. Free microslide price list on request. ESBE LABORATORY SUPPLIES, 459 Bloor Street, West, Toronto 4, Ont. Canada

FOR ROYAL JELLY: Quality and Quantity  
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## Buy Quality Package Bees and Queens

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	Starlines	Italians	2-lbs.	3-lbs.	4-lbs.
1 - 24	\$1.70	\$1.30	\$4.05	\$5.05	\$6.05
25 - 99	1.60	1.25	3.95	4.95	5.95
100 - up	1.50	1.20	3.85	4.85	5.95

For Dadant Starline Queens - Add 30c Extra Per Package  
MAY 20th—deduct 20c per unit on above prices - EXCEPT on Starline Queens - to be reduced June 1.

Queens Clipped, Marked and Air Mailed At No Extra Charges

**GARON BEE COMPANY**

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## HONEY WANTED

ALL GRADES, SEND SAMPLES,  
ADVISE QUANTITY AND PRICE

EVERYTHING FOR THE BEEKEEPER

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## QUEENS

Two extra good races of bees - real good honey gatherers and very gentle.

	1 to 25	25 to 100	100 up
2 lb. packages	\$4.50	\$4.25	\$4.00
3 lb. packages	5.70	5.45	5.20
Queens	1.45	1.35	1.25

For extra pounds of bees add \$1.10 per pound

For Tested Queens \$2.50 each any number

Starline Bees and Queens — Best of honey production — use Starlines  
Add 30c to each queen or package if you want hybrids

Health Certificate with every order shipped

## ALAMANCE BEE COMPANY

Geo. E. Curtis & Sons

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You can order any size order for 25 or less, and receive shipment at once.  
2-lb. pkg. with queen exp. collect or not postpaid ea. \$4.00  
3-lb. pkg. with queen exp. collect or not postpaid ea. 5.00  
QUEENS each Air Mail Postpaid 1.00

GULF COAST BEE CO.

Schriever, La.



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## BOOST YOUR INCOME

without adding more colonies or doing more work. By actual test Starline Queens produce more honey than any other stock tested. You owe it to yourself to give them a trial.



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## QUALITY BEES AND QUEENS

Queens for May and June shipment

3 Banded Italians \$1.10

Dadant's Starlines 1.40

Less 10% on 25 or more after May 15

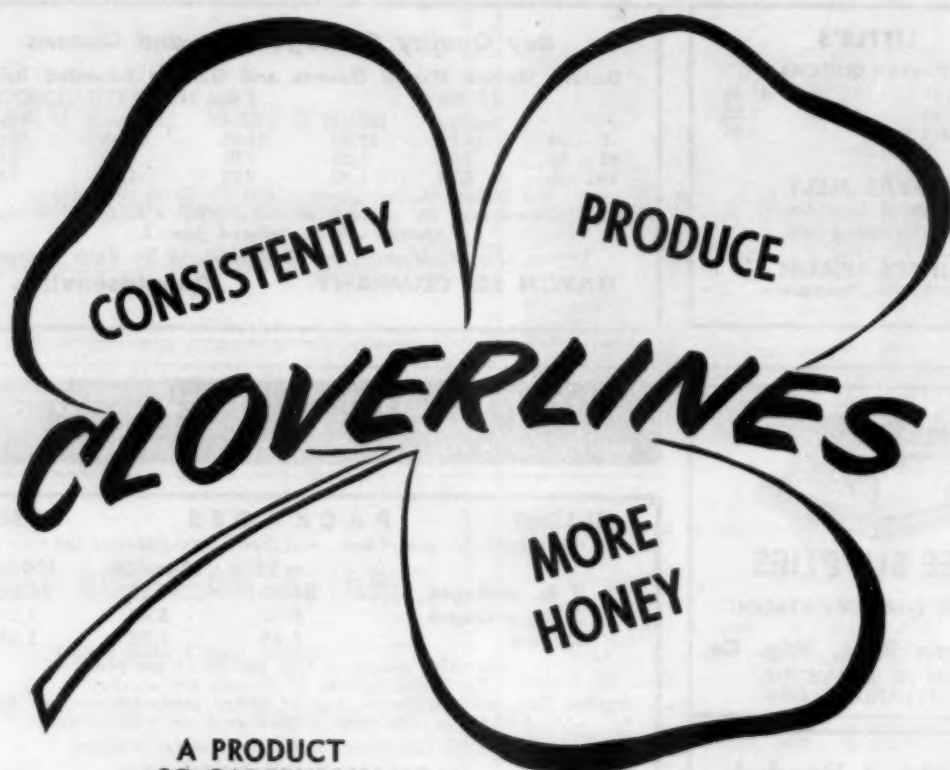
Twenty years of dependable quality and service

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A PRODUCT  
OF CAREFULLY  
CONTROLLED  
CROSS BREEDING

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ITALIANS

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Our queen yards will be in full operation until October 15th. Thousands of world famous CLOVERLINE queens will be available for your requeening and other needs. BOOK YOUR ORDER EARLY FOR PREFERRED DATES.

We ship only young queens, guaranteed mated and laying. Clipped and marked at no extra charge and shipped air mail postpaid.

### **PRICES**

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1-24

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50 and over

\$1.00 each

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100 KELLEY'S Easy Grip  
Hoffman Style Brood  
Frames

9 1/4" x 17 1/4" with 19"  
top bars

**\$11.95**

We have a real super market  
of bee supply values. Many  
carloads of wooden goods,  
metal goods, comb foundation  
and miscellaneous items well in

excess of \$100,000.00 in value. Come with trailer or car or mail your order in and we will load your order right  
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Write for details.

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## AFRICAN BEEKEEPING

Successor to the S.Af. Bee Journal.  
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## Italians Bees & Queens

2 lb. pkg. w/q. \$3.45 4 lb. pkg. w/q. \$6.00  
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Extra queens—\$1.00  
Live delivery guaranteed and health  
certificate with each shipment.  
10% books your order.

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## Drugs for Bee Diseases

Sodium Sulphathiazole  
For American foulbrood

Terramycin  
For European foulbrood

Fumidil-B  
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Write for directions and  
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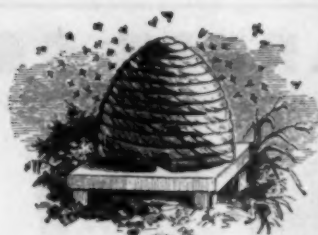
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**Write for our 1958 Price List**

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# MEETINGS



## HERE and THERE

**Annual Beekeepers Short Course  
Presented by  
Iowa State College, Ames, Iowa  
Memorial Union - Rooms 205-206  
Tuesday, May 6, 1958**

**Theme—Bee Disease Control**

9:00 a.m.—Registration, Group Conferences

9:30 a.m.—Inheritance as a control factor, Dr. W. C. Rothenbuhler, ISC

10:30 a.m.—Nosema, the silent killer, Dr. T. A. Gauchnauer, St. Paul, Minn.

11:30 a.m.—Serving the beekeepers—Dr. H. M. Harris, ISC

### Noon

1:30 p.m.—Disease control in the apiary—G. H. Cale, Hamilton, Ill.

2:30 p.m.—The great sulfathiazole controversy—Dr. Gauchnauer

3:30 p.m.—Recent developments on royal jelly—Victor Thompson, ISC

4:30 p.m.—Iowa Beekeepers Association board meeting.

### Evening

6:00 p.m.—Through the cafeteria line to Pine Room

7:30 p.m.—Movie, Need for pollination

8:00 p.m.—Conservation values for the beekeeper, Illustrated—Dr. R. B. Moorman, ISC  
Wednesday, May 7, 1958

9:00 a.m.—Registration, Group Conference.

9:30 a.m.—Package installation—Dale Polhemus, ISC.

10:00 a.m.—Microbiological research on the honey bee diseases—Dr. Gauchnauer

11:00 a.m.—What's ahead for beekeepers—G. H. Cale

### Noon

1:30 p.m.—Profit from sideline production—F. L. Swanson, Council Bluffs, Iowa

2:30 p.m.—Equipment improvement—Walter Johnson, Sioux City, Iowa

3:30 p.m.—Question Box—F. B. Padlock, Moderator

Bring: Friends, questions, notebook  
Parking: Short Course Lot, down hill 1 block east of Union

### Apicultural Society of Rhode Island Providence, May 25th

Outdoor meeting at home of W. K. Davis, 81 Bergen Street, Providence May 18th at 2 p.m. Inspection of apiary and beekeeping problems discussed. In the event of inclement weather meeting will be held on May 25th. Bring along bee veils.  
Wulf Kroegel,  
Corres. Sec.

### Midwestern, Kansas City, May 18th

The Midwestern Beekeepers' Association will meet at the Co-op Building, 3315 North Oak Trafficway, Kansas City, Missouri at 2:30 p.m., Sunday, May 18th. On the agenda will be a talk on swarm control and a movie on beekeeping. A tour of the Co-op Building and grounds will be a special feature. Everyone welcome.  
Carroll L. Barrett  
Secretary

### Norfolk County (Mass.) Walpole, May 12th

The next meeting of the Norfolk County Beekeepers' Association (Mass.) will be held May 12, 1958 at the Norfolk County Agricultural School, Walpole, Mass., at 6:30 p.m. Inspection of the club hive will be the interesting feature of the evening. The April meeting was well attended. The "Production of Honey in an Industrial Area" by Mr. William Davis of Providence, Rhode Island, was interesting and instructive. Mr. John Proctor installed package bees in a hive, and it will be this hive that will receive special interest May 12, 1958.

Edith L. Colpitts  
Corres. Sec.

### Middlesex County (Mass.), Weston, May 24th

The first outdoor meeting of the season of the Middlesex County Beekeepers' Association (Mass.) will be held on Saturday, May 24, 1958, at the home and apiaries of member, Mrs. S. S. Fitzgerald, 62 South Avenue, Weston, Mass. The club hive will be inspected, a business meeting will be held, and a picnic supper will conclude the day. The meeting will begin at 2 p.m.

At the April meeting a new slate of officers for the 1958-1960 term was elected by the members present. These officers are now busy making plans for future meetings and activities of the Association.

L. C. Proctor,  
Corres. Sec.

### Minnesota Short Course May 7-9

Sixteenth annual short course in beekeeping will be given on May 7, 8, and 9 at the St. Paul campus of the University of Minnesota. The life story of bees, their development, nutrition; spring, summer, fall management and wintering; production, marketing and the food value of honey; value of bees to agriculture; beekeeping laws and diseases of bees will be discussed. The course is open to all.

### Illinois Summer Meeting Belleville, July 19 and 20

President Harry E. Dale and Vice-President C. M. Leiper (also Secretary of the St. Clair Association) have set the date for the Summer Meeting of the Illinois State Association as July 19th and 20th at Belleville. So keep this date open. More details later.



**Fourth Annual Conference of the Eastern Apicultural Society, August 7-9 University of Massachusetts, Amherst**

The Society will be guests of the University. The Eastern Apicultural Society consists of a group of member organizations that donate \$25, more or less, to its support. Under this arrangement, last year eleven organizations, with a combined membership of over 2000, contributed. The conference is self-supporting and these donations are interim expenses, printing, mailing costs, and so on. In point of numbers the EAS will soon be the largest beekeeping organization in the country.

Registration will start on Thursday afternoon, August 7th. During the afternoon there will be guided tours of the campus, the town and/or the surrounding country. Greenfield, where Langstroth wrote his book, **THE HIVE AND THE HONEY BEE**, is less than 20 miles to the north. Mount Holyoke College and Smith College are less than 10 miles away and Amherst College is at the other end of the town.

Thursday evening there will be a motion picture. Friday and Saturday, at the morning and afternoon sessions of the conference, there will be speakers of national and international reputations. Friday afternoon there will be a special program for the ladies. Friday evening there will be a square dance and Saturday evening the banquet. There will be a Beginner's Clinic; a Honey and Honey-Cookery Contest (both with prizes); a Gadget and Antique Display; and an Exhibition of Bee Supplies.

As usual expenses will be low. Assuming you arrive Thursday afternoon and leave Sunday morning your expenses will not exceed:

EAS Registration Fee \_\_\_\_\_ \$ 2.00  
University Registration Fee \_\_\_\_\_ 2.00  
Banquet (approximately) \_\_\_\_\_ 2.50  
Room per day per person, 2.50 7.50  
Meals per day per person, 3.50 7.00  
Total \_\_\_\_\_ \$21.00

The University of Massachusetts is providing some of the speakers for the program, as has been done by some of our past hosts.

Right now make your plans to attend this year and invite others to do likewise. Urge your organization to join EAS by making a donation. Send it to our treasurer. If your organization does not join, you, as an individual, may join for a dollar. However, it's more of a bargain through the organization.  
Porter H. Evans  
Chairman Publicity Committee

**Eastern Missouri Officers**

The Eastern Missouri Association held its regular meeting Tuesday evening, November 5th, at the County Court House in Clayton. Election of officers was held and the following were elected to serve for 1958.

President—Ray Reinhold

1st Vice President—John Morden

2nd Vice President—Herman Leely

Secretary—W. Wallace Daugherty

Treasurer—Kurt Simon

Trustee 3 years—George Nagel

Trustee 2 years—Julius Simon

Trustee 1 year—Herman Meyer

W. Wallace Daugherty  
Secretary

**Thanks to K.C.M.O.  
from Northeast Kansas**

The Northeastern Kansas Association gratefully extends its thanks to the KCMO-TV Station, Kansas City, for its broadcast of the show on bee culture as a part of the Farm Show, April 25th. Participants were President Maynard D. Curtis and Secretary R. F. Ferguson. All the equipment of beekeeping was shown, together with a one frame display colony of bees. Honey and honey-handling equipment were also explained. We trust it will be a benefit to the industry.

R. F. Ferguson, Secretary



**MICHIGAN BIG WIGS** — From Dirk Bloemendaal, Holland, Mich. Former president of the State Association, at left, Russell M. Kelly. Then President Walter Edwards. Secretary Margaret Seidemann, finally Treasurer Ottomar Rath.

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- Allows maximum bee passage
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- No sharp edges to injure bees
- So durably made that it is permanently queen excluding and will last a life time.

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Now is the time to place your order for package bees and queens. All indications are that the demand will be heavy and we urge you to place your order early.

We have spent years developing and improving our present strain of bees. Breeding stock is tested and proven in our own honey producing apiaries. You will find our bees pleasing in appearance, easy to handle and tops in production.

Shipping season started about April 1st. Shipments by express, parcel post or your truck. We guarantee live delivery, a health certificate with each shipment and service on which you can depend.

### — PRICES —

	1-9	10-49	50-up
2 lb. pkg. with young laying queen	\$4.25	\$4.00	\$3.75
3 lb. pkg. with young laying queen	5.35	5.10	4.85
4 lb. pkg. with young laying queen	6.45	6.10	5.85
Extra Queens	1.40	1.30	1.20

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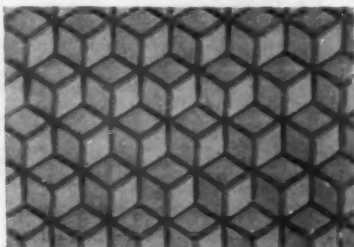
\* (R) STEWART TAYLOR, Camargo, Illinois

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# The Scramble — — A Contest

Editor - Pat Diehnelt



## APRIL SCRAMBLE—

Clare D. Floyd

Clare D. Floyd was born in New Brunswick, Canada. He is the son of a noted Canadian extension beekeeper, L. T. Floyd, of Austin, Manitoba. C. D., as he is regularly known by the beekeepers, was educated in Canadian schools and colleges obtaining his B.S.A. degree from the University of Manitoba. He received his masters degree from the University of Minnesota. His special fields have been entomology and beekeeping. For a number of years he operated his own commercial apiaries and has a first-hand knowledge of the problems of the beekeeper. In later years, 1945 to date, he has served as State Apiarist of Minnesota. He has pioneered with chemotherapy and believes it to be "a useful tool in the hands of beekeepers trained to use it."

The first National Honey Show came into being as the result of an idea of C. D.'s to focus public attention on honey. An active promoter he has served as superintendent of the Bee & Honey Show at the largest paid State Fair in the country which is held in St. Paul. A million people see the Honey Show which functions as smoothly as a well-oiled machine with continuous performances for the public.

His present effort toward the National beekeeping picture is in the capacity of Chairman of the Federation Marketing Committee. These tasks are in addition to supervising a staff of some 20 inspectors as head of Minnesota's Apiary Inspection program.

### March Winners Carl E. Killion

#### Number One

James Pacinovsky, Tampa, Kansas

This is Carl E. Killion, Paris, Illinois, author and comb honey producer. Best known for his knowledge of comb honey production, as published in his book, "Honey in the Comb." Title—Honey Comb Baby.

#### Number Two

Joseph Garre, Aniwa, Wisconsin

None other than Carl Killion of Illinois. Well known (in partnership with his son) as an expert in the know-how of producing nice crops of Grade 1 comb honey on a large scale. At county and national exhibits his honey brings in



## Scramble For This Month

Now maybe we have you in a corner. In the Scramble so far, the "cut-ups" have been easy. This time you may have to do a real good fix on this gentleman before you come up with an answer. Get out your paste pot and go to work. Who is this capable gentleman? Seems like there should be a clue. Suppose we try this one — He lives south of the Mason and Dixon line but I am not sure he drinks mint juleps. Send your answers addressed to "Scramble," American Bee Journal, Hamilton, Illinois, anytime in May. I will judge the winners and they will be announced in July. For the best answer a three year subscription and your choice of a book (book list will be sent); for the second winner, a two year subscription; third, a one year subscription; next four, four months each. Now, who is this southern gentleman? Where does he live? What does he do? What fun title do you bestow on him?

enough blue ribbons for the wa'ls in his modern bee house. He contributes to the bee magazines and is the author of "Honey in the Comb." For years he has been Illinois Chief Inspector. Title "Wizzard."

#### Number Three

Homer Blackford, Marion, Indiana

Carl E. Killion, Paris, Illinois, Chief Apiary Inspector for the state. A master in the art of comb honey production. Title: Winner of the Blue

#### Number Four

P. S. Snow, Wichita, Kansas

Carl E. Killion, State Apiarist of Illi-

nois, author of "Honey in the Comb" and the greatest living comb honey producer. In 1951 he set a world record of 264 sections per colony from 100 colonies, spring count, breaking the record of Dr. C. C. Miller, in 1913 of 245 sections per colony. Title: King Comb

Congratulations also to R. D. Richey, Temple City, Cal., his title: Comb Honey King; Alan T. Monroe, North Brookfield, Mass., title, Mr. Comb Honey; Mel Ott, Forest City, Ill., title: Master of Fancy Comb Honey.



# —The Market Place—

## BEES AND QUEENS

**BRIGHT ITALIANS:** 3 lbs. with Queen, \$4.75, 2 lbs. with Queen, \$4.00, Queens, \$1.25, Sheppard Apiaries, Aberdeen, North Carolina.

**3-BAND ITALIAN and Carniolan bees—**3 lbs. with queen, \$4.90; 3-lbs., \$6.00. Queens \$1.25. Luther Pickett, Efland, N. C.

**THE GOLDEN APIARIES Italian bees.** 3-lbs. with untested queen, \$4.30 each; 4-lbs. with untested queen, \$5.00 each. Queenless packages, deduct 80c per package. Live delivery and a health certificate with shipment. Maurice Roy, Hesser, Louisiana.

**CARNIOLANS AND CAUCASIAN QUEENS** \$1.00 each. I have doubled my output to fill the demand this time. A few packages of bees. Price of package bees with queen, \$4.50. Roy Waddell, Route No. 3, Woodruff, South Carolina.

**CARNIOLAN & CAUCASIAN, 2 lb. package** \$4.00 each, 3 lb. package \$5.00 each, untested queens, \$1.00 each. Italian bees with Carniolan or Caucasian queens, 3 lb. package \$4.50 each. Tillery Brothers, Greenville, Alabama.

**HIGNITE'S ITALIAN QUEENS, 10 years** selection behind each queen, \$1.25 each, 10 or more \$1.10 each. Hignite's Bee Farms, 230 S. Lynchburg Rd., Baytown, Texas.

**QUALITY BRED ITALIAN BEES AND QUEENS,** March queens, \$1.45 each, April and May, \$1.00 each, 2 lb. package with queen \$4.15 f.o.b., 3 lb. package with queen \$4.90 f.o.b. Walter D. Leverette Apiaries, P.O. Box 364, Ft. Pierce, Fla.

**GOLDEN ITALIAN QUEENS:** Bees very large and gentle and heavy honey producers. Price 85c each. Guaranteed live arrival and health certificate. Allen H. Gauthier, Hamburg, La.

**PACKAGE BEES, QUEENS, Attractive offers.** Write for prices. Crenshaw County Apiaries, Rutledge, Alabama.

**CARNIOLAN QUEENS \$1.00.** Air. Leo Wardell, Route 6, Palestine, Texas.

**DARK, Italian Queens, \$1.00** Henry Loehr, Caldwell, Texas.

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**BEESWAX direct importation from Mexico.** Nicholas Vallos, Blue Hills Station, Hartford, Connecticut.

**FOR SALE: Royal Jelly.** Royal Jelly Enterprises, 1017 Los Carneros Avenue, Napa, Calif.

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**FOR SALE: 100 strong colonies of bees.** Contact Edwin Giew, Box 152, Paris, Texas.

**BOOSTER BEES 70c lb. after May 15th.** Bulk or packed tupelo and gallberry extracted or comb. A. V. Dowling, Valdosta, Georgia.

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**FOR SALE: 18 colonies and immense** amount of equipment. Good condition. State inspected. C. C. Miller, Roann, Indiana.

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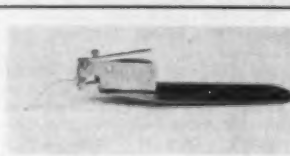
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## Interested in Royal Jelly Production?

A 10-day short course of practical training now offered by one of the nation's leading authorities on queen rearing and Royal Jelly production. 35 years' experience.

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## SELECT ITALIANS Package Bees Queens

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## HONEY WANTED

Cut Comb and Extracted  
Advise what you have

**T. W. BURLESON & SON**  
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## Caucasian or Italian Bees and Queens

	2 lb.	3 lb.	4 lb.	5 lb.
	w/q.	w/q.	w/q.	w/q.
1 - 48	\$4.00	\$5.00	\$6.00	\$7.00
50 - up	3.75	4.75	5.75	6.75

All Queens postpaid, airmail

Health certificate & live arrival guaranteed.

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Quality Italian Queens

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IN CARLOAD LOTS  
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## ITALIANS

Queens \$1.25 ea. — Bees \$1.00 per lb.  
Cages 50c — Royal jelly by contract  
**NASSAU BEE CO.** Hilliard, Florida

## ITALIAN Queens — Package Bees

	1 - 24	25 - 49	50 & over
May Queens	\$1.25	\$1.10	\$1.00
2 lb. pkgs.	4.15	3.75	3.75
3 lb. pkgs.	5.10	4.75	4.75

## John S. Shackelford

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## FLOWERS' QUALITY ITALIANS

OUR BEES STAND TEST FOR HONEY GATHERERS, GENTLE, PROLIFIC. Bred from hives making 300-lbs. or over honey. FUMIDIL-FED grafting and queen yards. HEALTH CERTIFICATES with each shipment. We are prepared to fill all orders promptly. COME AFTER YOUR BEES or shipped express or P.P. PROMPT LIVE DELIVERY GUARANTEED. \$1.00 deposit per package. Balance two weeks prior to shipping dates. ORDER NOW FOR CHOICE SHIPPING DATES. PRODUCERS OF ROYAL JELLY ALSO.

All packages with select young laying queens F.O.B. Jesup.  
2-lb. package w/q. \$3.75 — 3-lb. package w/q. \$4.75  
4-lb. package w/q. \$5.75 — 5-lb. package w/q. \$6.75

For queenless packages deduct price of queens.  
Select Queens—\$1.00 Tested Queens—\$2.00 1 or 1000 all airmail

Write us on large orders. We can help you.  
**FLOWERS BEE CO.** Ph. Juno 4-2830 or 4-2837 Jesup, Ga., U.S.A.

## California Caucasians

Gentle and industrious Caucasian queens. NEW - Midnite Hybrid Caucasian queens. J. E. Hastings breeders used for Regular queens. Ready to ship about April 10th. 10% books your order - Balance due two weeks prior to shipment. Air Mail. Also Package Bees available.

Number of Queens	Regular	Midnite
1 to 24	\$1.40	\$1.70
25 to 99	1.30	1.60
100 and over	1.20	1.50

Quality and Service Doesn't Cost — IT PAYS

## DON J. STRACHAN Yuba City, Calif.

R. 2, Box 83

Phone Sherwood 23881

## SUNKIST STARLINE QUEENS

PRICES UNTIL JUNE 1

1 - 25—\$1.70	25 - 99—\$1.60	100 up—\$1.50
Prices after June 1: 1 - 25—\$1.30	25 - 99—\$1.15	100 - up—\$1.00

Clipped, postpaid, painted — Live Delivery

**SUNKIST BEE CO.** Tel. Underhill 9-5645 Convent, Louisiana

## Dark Italian Queens

We have lots of open dates until May 20 for shipping our line bred queens at the following prices:

1 - 9—\$1.40	10 - 49—\$1.30	50 - 99—\$1.20
100 up—\$1.10		

After May 20—

we will have queens all Summer and Fall as follows:  
1 - 24—75c each 25 - 499—70c each

LET US HEAR FROM YOU.

## Louis L. Couch

Phone 25665

Pineville, La.

# —Crop and Market—

by M. G. Dadant

## AMOUNT OF HONEY LEFT

We are pleasantly surprised at the amount of honey reported sold since our last report. Outside of occasional lots, most honey in the eastern half of the country is marketed. The consumer demand continues and, of late, there has been a pickup both in the packer and foreign demand. This does not mean that all honey will be sold or reclaimed from government loan sources, but it does mean a much better position than appeared possible two months ago. Most of the white honey still on hand is in the northern inter-mountain territory. There is considerable amber to dispose of in California and in central and southern districts. The Central Canadian Provinces will hardly dispose of the large crop of 1957, in fact have appealed with favorable results to the Canadian Government to help out in marketing the balance of the crop.

## WILL HONEY MOVE?

Mostly honey has moved or will all move ahead of the new crop, though there will be some carry over chiefly on amber grades and in the provinces of Quebec, Ontario, Manitoba and Saskatchewan in Canada.

## COLONY LOSSES

In the main we believe that the losses have been a little larger than usual, but no more than should be expected with the heavy and prolonged weather. Probably more losses will be attributed to colonies running short of stores ahead of the new flows. In California, particularly the rainy and cool weather has hindered bees from activity and resulted in colony losses where the producer was not "on the job" to see that natural stores were made up by feeding.

Losses may run from 10 to 15% in some instances. This is true of the southern Atlantic seaboard particularly. Tennessee also reports considerable losses. In fact those areas where the bees did not get the opportunity of a fall flow may well look to their bees needing feeding.

Naturally, those areas which kill off the bees in the fall and replace with packages in spring are not affected, though a late and unfavorable spring in the South has made

a "run" on demand both for bees and for queens to make up winter losses. It may be that the Southerners will not be able to furnish bees as fast and as early as wanted by their northern customers. And there is little possibility of help from California where the breeders have been bedeviled by heavy rains, floods, and cool impossible queen weather.

## CONDITION OF BEES

All agree, however, that the condition of those bees which have survived, and in the central areas are ahead of usual in a backward season. In California weather has been the deterring factor in the orange crop which appears to be short this year. No possibility of bees getting out on account of cool wet weather. Tennessee, Miss. and Ala. report bees backward, and Wisconsin, Colorado, and California and a number of other states report feeding necessary to ward off losses.

## HONEY PLANTS

There is a possibility that the fall drought of late 1957 may make for a shortage of honey plants this spring, but it is a certainty that the abundance of moisture has seen a revival of hopes.

The extremely dry areas of Arizona, New Mexico, Texas and the Southwest up into the plains states have had wonderful moisture. And this goes for the whole mountain irrigated areas. Complaints come only from Michigan, northern Wisconsin and over into Dakota and Montana of moisture deficiency. On the other hand, even with a drizzly spring, California beekeepers are apparently happy with more moisture than in many a year, and an almost certainty of better things to come from the dry areas a little later on.

In fact the writer does not remember a season when beekeepers were so unanimous in their reports of fine possibilities on account of the moisture, even though the amount of acreage of nectar producing plants may be below average. Florida's

freeze did damage, but the moisture has in a way compensated, and the dry riverbeds and lakes of Georgia have given way to bank full conditions. Are we, perhaps this year going to see one of those longed for sourwood years also in the Appalachians? Whether or not, beekeepers are encouraged or else they are getting out. No doubt about it.

## COMPARISON TO A YEAR AGO

Canadians expect about the same yields as a year ago. The Northeast, the Southeast, the Central West all seem to feel that this will be a better year than 1957 by 25% if we can go on April 15 conditions. There are some flies in the ointment. Michigan with a good crop in 1957, looks for a little less this year, as do Tennessee, Wyoming, eastern Montana, and a very few other sections. Otherwise things appear rosy, with the late April weather, however, interfering with the early stimulative flows and with the citrus flows.

As "hope springs eternal in the duck hunters breast," so it does this year especially with the beekeeper.

## The Bees of Swanland

A rather unusual book comes out of England, written in poetry by one of beekeeping's popular English writers, David Bone. It is entitled "The Bees of Swanland," a book of some 155 pages, with 25 well-done drawings of skeps, hives, apiaries, and beekeeping utensils, etc.

The book was conceived by Mr. Bone during the dark days of the last war when his air-force duty took him near his old home, where he had earlier spent many happy days among his old surroundings with his bees.

The writer is not an apt scholar of poetry, but the book seems well done, covering as it does, the seasons of the year, and the various reminiscences of the author. Cloth bound, the book is excellently done. Copies are now available by sending international money order to Mr. David Bone, in the amount of \$3.25 at 6 Perth Road, Beckenham, Perth, England.

**Honey Wanted**—Cars and less than car. Top Prices.  
C. W. Aeppler Co., Oconomowoc, Wis.

**ITALIAN BEES and QUEENS**  
 3 lbs. with queen .....\$4.00  
 4 lbs. with queen .....\$4.90  
 Extra Queens .....\$1.10  
 Deduct \$1.10 for queenless pkg.  
 Live Delivery and health certificate  
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One 4-oz. Jar of Honey contain-  
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**ROYAL JELLY**

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12 or more Jars—20% Discount

We Deliver it in U.S.A.

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 Shows the Way to Success

The leading Rabbit Farming Magazine.  
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Truck loads a specialty. Nuclei made  
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**THRIFTY BEES**—Combless packages  
 and queens. Three-banded Italians  
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 are **GUARANTEED** to **PLEASE**.  
 write for prices.

**W. J. FOREHAND & SONS**  
 Fort Deposit, Ala., Breeders since 1892

**Italian Bees and Queens**

2 lbs. with queen .....\$3.50  
 3 lbs. with queen .....4.50  
 4 lbs. with queen .....5.50  
 Extra queens .....\$1.20 each  
 Health certificate and live arrival  
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**RAYMOND McFARLING**  
 Rt. 3 Tupelo, Mississippi

**ITALIAN — "GULF BREEZE" — QUEENS**

Gulf Breeze queens are bred to a high standard of quality.  
 Use them for requeening and for divisions.  
**PRICES:— 1-9—\$1.40 10-49—\$1.30 50 up—\$1.20 each**

**Bessonnet Bee Company Donaldsonville, La.**

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For prompt change of address, please notify us six weeks beforehand;  
 otherwise, some issues may miss you. Also, some back copies may not be  
 available.

Be sure to send both your **OLD ADDRESS** and your new address,  
 including the postal zone number. If possible, just return the mailing label  
 from a recent copy of the **American Bee Journal**.

Write to **SUBSCRIPTION DEPARTMENT, AMERICAN BEE JOURNAL**,  
 Hamilton, Illinois

**BETTER BRED QUEENS**

**Three Banded Italians**

As we write this ad, April 10th, spring has opened with a bang — about  
 3 weeks late. We will have plenty bees for May shipments. Rush orders filled  
 promptly.

	Queens	2 lb.w/q	3 lb. w/q
1 to 24	\$1.40	\$4.25	\$5.35
25 to 99	1.15	3.75	4.75

After May 15th, packages 25c less. Queens 85c any quantity.

**CALVERT APIARIES Calvert, Ala.**

**Plan Ahead**

Be sure you have that extra equip-  
 ment ready when your bees need that  
 extra room. Will you have it? They  
 can't produce without your help. We  
 can give you prompt shipment now.

**Leahy Manufacturing Co.**

**Box AB**

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**JENSEN'S**

**Package Bees and Queens**

Packages with Dadant "Starline" Hybrid Queens:			Jensen's "Magnolia State" Italian Queens:		
	1-24	25-99		1-24	25-99
2 Lb.	\$4.30	\$4.55	100-up	\$4.30	\$4.55
3 Lb.	5.90	6.65		5.60	6.35
4 Lb.	7.00	7.75		6.70	7.45
QUEENS	\$1.75	\$1.65		\$1.45	\$1.35

Clipped and Marked Free

**JENSEN APIARIES — Macon, Mississippi — U.S.A.**





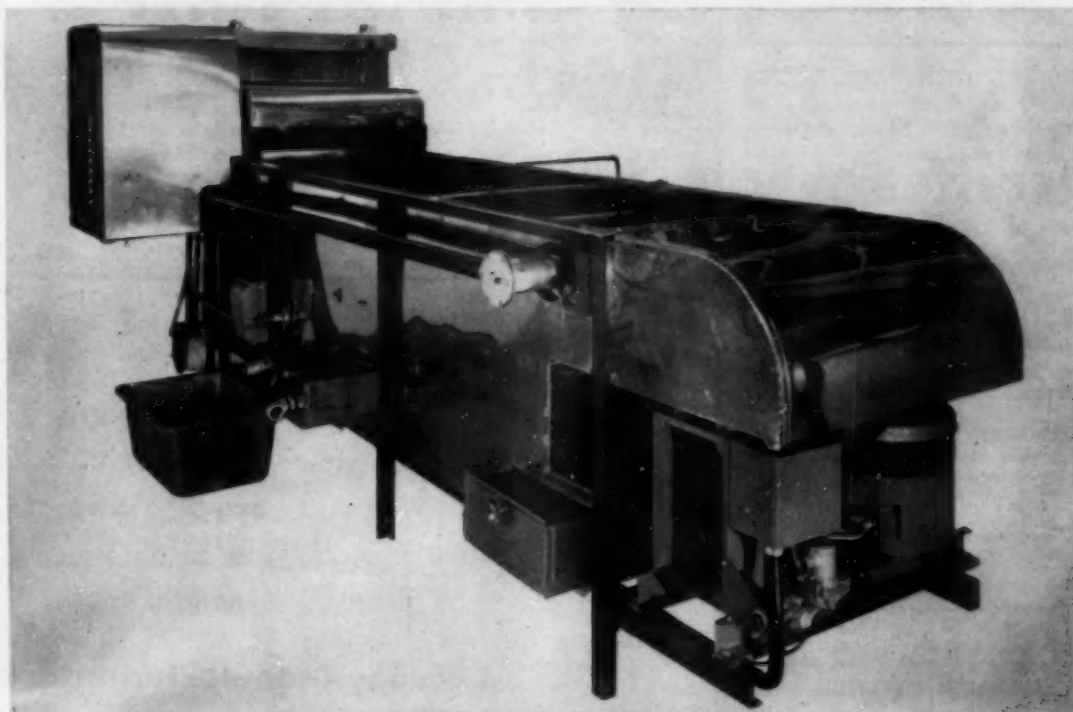


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**SUE BEE AUTOMATIC UNCAPPER AND MELTER**



Write for full information and our new brochure.

**We have several used, 1957 uncappers. These are  
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**P.O. Box 1107**

**Sioux City, Iowa**

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Just place the nail in the  
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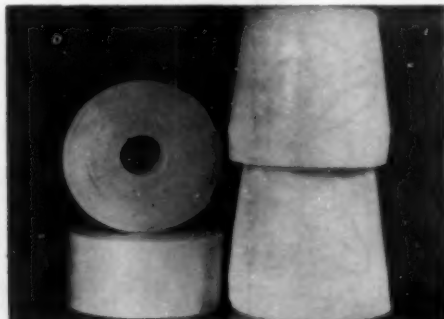
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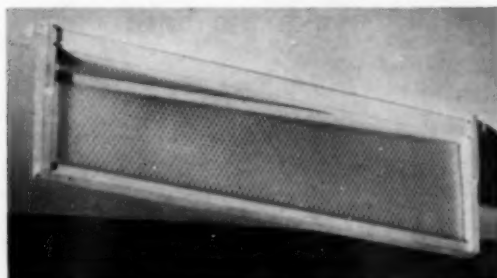


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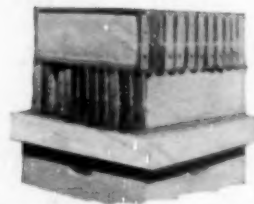


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